

Jarrell, Noble

173281

From: Ramirez, Delia
Sent: Thursday, December 01, 2005 5:55 PM
To: Jarrell, Noble
Subject: 09/165460

Hi,
I would like to request the following interference search:

1. SEQ ID NO:1 and 3 in the nucleic acid databases
2. SEQ ID NO:2 and 4 in the protein databases

Thank you very much,

Delia M. Ramirez, Ph.D.
Patent Examiner
Recombinant Enzymes-Art Unit 1652
USPTO
400 Dulany Street, Remsen Bldg., 2D74, Mail room 2C70
Alexandria, VA 22314
(571) 272-0938
delia.ramirez@uspto.gov

Wth
12/9/05 2/VA
5 PR 2AA
SON
CompuGen

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: December 8, 2005, 16:30:04 : Search time 316.593 Seconds
(without alignments)
10246.741 Million cell updates/sec

Title: US-09-165-460A-1
Perfect score: 1825
Sequence: 1 acctactctttttctatct.....aaaataaacgattaaacatt 1825

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA.*
1: /cgn2_6/ptodata/1/ina/1 COMB.seq.*
2: /cgn2_6/ptodata/1/ina/5 COMB.seq.*
3: /cgn2_6/ptodata/1/ina/6 COMB.seq.*
4: /cgn2_6/ptodata/1/ina/6B COMB.seq.*
5: /cgn2_6/ptodata/1/ina/H COMB.seq.*
6: /cgn2_6/ptodata/1/ina/PP COMB.seq.*
7: /cgn2_6/ptodata/1/ina/PP COMB.seq.*
8: /cgn2_6/ptodata/1/ina/RE COMB.seq.*
9: /cgn2_6/ptodata/1/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1802	98.7	1825	US-09-184-964-1	Sequence 1, Appli
2	354.4	19.4	1473	US-09-248-796A-5807	Sequence 5807, Ap
3	136	7.5	686	US-08-998-416-929	Sequence 929, App
4	117.4	6.4	2968	US-09-022-699-1	Sequence 1, Appli
5	88.2	4.8	684	US-09-533-559-7530	Sequence 7530, Ap
6	79.8	4.4	649	US-09-533-559-454	Sequence 454, App
7	54.6	3.0	601	US-09-949-016-172190	Sequence 172190,
8	54.6	3.0	601	US-09-949-016-172191	Sequence 172191,
9	54.6	3.0	601	US-09-949-016-172192	Sequence 172192,
10	54.6	3.0	601	US-09-949-016-172193	Sequence 172193,
11	54.6	3.0	7218	US-08-232-463-14	Sequence 14, Appl
12	54.6	3.0	102008	US-09-949-016-16617	Sequence 16617, A
13	52.2	2.9	147382	US-09-949-016-14624	Sequence 14624, A
14	51.6	2.8	1641	US-08-300-903A-8	Sequence 8, Appli
15	51.6	2.8	1641	US-08-988-197-8	Sequence 8, Appli
16	51.6	2.8	1641	US-10-385-072-8	Sequence 12896, A
17	50.8	2.8	451924	US-09-949-016-12896	Sequence 12896, A
18	50.8	2.8	451925	US-09-949-016-17305	Sequence 17305, A
19	50.4	2.8	187595	US-09-949-016-15546	Sequence 15546, A
20	50	2.7	601	US-09-949-016-135595	Sequence 135595,
21	49.6	2.7	601	US-09-949-016-135596	Sequence 135596,
22	49.6	2.7	1024	US-09-328-475C-50	Sequence 50, Appli
23	49.6	2.7	1459	US-09-537-654-3	Sequence 3, Appli
24	49.4	2.7	154600	US-09-949-016-14757	Sequence 14757, A

Sequence 5, Appli
Sequence 14, Appl
Sequence 12505, A
Sequence 14207, A
Sequence 12900, A
Sequence 12412, A
Sequence 13291, A
Sequence 16631, A
Sequence 16632, A
Sequence 15604, A
Sequence 12306, A
Sequence 17578, A
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 16, Appl
Sequence 16, Appl
Sequence 16, Appl
Sequence 16, Appl
Sequence 76967, A
Sequence 11, Appl

ALIGNMENTS

RESULT 1
US-09-184-964-1
; Sequence 1, Application US/09184964
; Patent No. 6391574
; GENERAL INFORMATION:
; APPLICANT: Rine, Jasper D.
; APPLICANT: Boyartchuk, Victor L.
; APPLICANT: Ashby, Matthew N.
; TITLE OF INVENTION: AFCl AND RCe1: ISOPRENYLATED CAAX
; TITLE OF INVENTION: PROCESSING ENZYMES
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill road, suite 100
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/184,964
; FILING DATE: 03-NOV-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/902,774
; FILING DATE: 30-JUL-1997
; APPLICATION NUMBER: 60/023,491
; FILING DATE: 07-AUG-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Suyat, Reginald J.
; REGISTRATION NUMBER: 28,172
; REFERENCE/DOCKET NUMBER: 09272-006004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/322-5070
; TELEFAX: 650/854-0875
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1825 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: Genomic DNA
US-09-184-964-1

Query Match				98.7%;	Score 1802;	DB 3;	Length 1825;				
Best Local Similarity				99.9%;	Pred. No. 0;						
Matches 1824;				Conservative	0;	Mismatches	0;	Indels	2;	Gaps	2;
Qy	1	ACCTACCTTTTTTTCTATCTTCAACAAAGAAAGCGCTTACACACACACACATACATCT	60								
Db	1	ACCTACCTTTTTTTCTATCTTCAACAAAGAAAGCGCTTACACACACACACATACATCT	60								
Qy	61	ACATACATACATACAAATATACATATATGTAAACTTTGTATATTCTTCTATTAAACCAA	120								
Db	61	ACATACATACATACAAATATACATATATGTAAACTTTGTATATTCTTCTATTAAACCAA	120								
Qy	121	AAGAGGCAATTAACCTTTTCCCTCTTTTCTACGTCAATTTACTCAAAAACCTCTAAATTCCT	180								
Db	121	AAGAGGCAATTAACCTTTTCCCTCTTTTCTACGTCAATTTACTCTCAAAAACCTCTAAATTCCT	180								
Qy	181	TCGTCTCTGTCTCGCCATTTTCTCCAGAAAAAATCGACGGGAAATTAATAAAAAAAGAC	240								
Db	181	TCGTCTCTGTCTCGCCATTTTCTCCAGAAAAAATCGACGGGAAATTAATAAAAAAAGAC	240								
Qy	241	AACGAACAAGAGAAAAAGTTTCGGGAATTATAAACCACTTCTATAATTAAACAGGAAAAAGGA	300								
Db	241	AACGAACAAGAGAAAAAGTTTCGGGAATTATAAACCACTTCTATAATTAAACAGGAAAAAGGA	300								
Qy	301	AGGAAAAAAGAGGAGAAATPAGAAAACTGCAGGCCCTTTATTCAATGTTTGAATCTTAAGACG	360								
Db	301	AGGAAAAAAGAGGAGAAA-AGAAAACTGCAGGCCCTTTATTCAATGTTTGAATCTTAAGACG	359								
Qy	361	ATTCTCGACCATCTAATATCCCGTGGAAATTAATCATTTTCTGGGTTCTCGATTGCCCAA	420								
Db	360	ATTCTCGACCATCTAATATCCCGTGGAAATTAATCATTTTCTGGGTTCTCGATTGCCCAA	419								
Qy	421	TTTTCTTTTTCGAATCTTACTTTGACGTACAGACAGTACCAAGAGCTATCTGAAACAAAGTTG	480								
Db	420	TTTTCTTTTTCGAATCTTACTTTGACGTACAGACAGTACCAAGAGCTATCTGAAACAAAGTTG	479								
Qy	481	CCACCTGTGCTGGAAGACGAAATTTGATGATGAACCTTTTCATAAAATCAAGGAACCTACTCC	540								
Db	480	CCACCTGTGCTGGAAGACGAAATTTGATGATGAACCTTTTCATAAAATCAAGGAACCTACTCC	539								
Qy	541	CGGGCCAAAGGCAAGTTTCTCGATTTTTCGGTGACGTCTATAACCTAGCCCAAAGCTAGTT	600								
Db	540	CGGGCCAAAGGCAAGTTTCTCGATTTTTCGGTGACGTCTATAACCTAGCCCAAAGCTAGTT	599								
Qy	601	TTCAATCAAAATACGACCTTTTCCCTAAAAATCTGGCAGATGCGCCGTTTCTTTATTGAATGCA	660								
Db	600	TTCAATCAAAATACGACCTTTTCCCTAAAAATCTGGCAGATGCGCCGTTTCTTTATTGAATGCA	659								
Qy	661	GTCTGCGCAGTTCAGATTTTCATATGTTCTCCACTGTGCGCAGAGAG-TTTATGCTTCTTGGG	719								
Db	660	GTCTGCGCAGTTCAGATTTTCATATGTTCTCCACTGTGCGCAGAGTTTATGCTTCTTGGG	719								
Qy	720	TCTCTTATCCAGTTTGTCTACTTGGTTGATTTTGCCACTCTCTTACTATAGCCATTTTGT	779								
Db	720	TCTCTTATCCAGTTTGTCTACTTGGTTGATTTTGCCACTCTCTTACTATAGCCATTTTGT	779								
Qy	780	CCTGGAAGAAAAATTTGGTTTCAATAAATTGACCGTCCAACTATGGATCACCAGATATGAT	839								
Db	780	CCTGGAAGAAAAATTTGGTTTCAATAAATTGACCGTCCAACTATGGATCACCAGATATGAT	839								
Qy	840	CAAGAGTCTGACTTTGGCGTATGCTATTGGTGGCCCAATCCTTTACCTGTTCTTCTTAAGAT	899								
Db	840	CAAGAGTCTGACTTTGGCGTATGCTATTGGTGGCCCAATCCTTTACCTGTTCTTCTTAAGAT	899								
Qy	900	CTTTGATAAAATCCCTACTGATTTTCTTTGGTACATTAATGGCTCTTCTGTTGTCCTGTC	959								
Db	900	CTTTGATAAAATCCCTACTGATTTTCTTTGGTACATTAATGGCTCTTCTGTTGTCCTGTC	959								
Qy	960	AATCTTAGCCATGACAAATCATCTCAGCTTTCATGATGCCCATGTTTAAATAGTTTCACTCC	1019								
Db	960	AATCTTAGCCATGACAAATCATCTCAGCTTTCATGATGCCCATGTTTAAATAGTTTCACTCC	1019								
Qy	1020	ATTGGAGGACGGTGAATGAAAAAATCTATTGAAAGTTTGGCCGATAGAGTTGGGTTCCC	1079								

DB	1020	ATTGAGGACGGTGAACTGAAAAAATCTATTGAAAGTTTGGCCGATAGAGTTGGGTTCCC	1079								
QY	1080	TCTAGATAAGATTTTGTTCATTTGACGGCTCAAAAAGATCTTCTCATTTCAAACGCATATTT	1139								
DB	1080	TCTAGATAAGATTTTGTTCATTTGACGGCTCAAAAAGATCTTCTCATTTCAAACGCATATTT	1139								
QY	1140	CACAGGTTTGCATTCACCTCCCAAGAGAAATCTGTTTGTTCGACACTTTTAGTGAACAGTAA	1199								
DB	1140	CACAGGTTTGCATTCACCTCCCAAGAGAAATCTGTTTGTTCGACACTTTTAGTGAACAGTAA	1199								
QY	1200	TTCTACTGATGAAATTTAGGGCTGTTTGGCCCATGAAATCGGTCACTGTCGCAAAAAACCA	1259								
DB	1200	TTCTACTGATGAAATTTAGGGCTGTTTGGCCCATGAAATCGGTCACTGTCGCAAAAAACCA	1259								
QY	1260	CATCGTTAATATGGTCACTTTTAGTCAATTCGACACCTTCCCTCATTTTCCCTTTTTCAC	1319								
DB	1260	CATCGTTAATATGGTCACTTTTAGTCAATTCGACACCTTCCCTCATTTTCCCTTTTTCAC	1319								
QY	1320	CAGCATCTACGAAATACATCATTTTACAAACCTTCCGCTTTTCTTAGAGAAGTCCAC	1379								
DB	1320	CAGCATCTACGAAATACATCATTTTACAAACCTTCCGCTTTTCTTAGAGAAGTCCAC	1379								
QY	1380	TGGCAGTTTGTGATCCGGTTATCACTAAGGAAATCCCATTTATCATTTGGATTTATGTT	1439								
DB	1380	TGGCAGTTTGTGATCCGGTTATCACTAAGGAAATCCCATTTATCATTTGGATTTATGTT	1439								
QY	1440	ATTTAACGACTTATTAACCTCCACTCGAATGTCGCAATTCGATGATGAGTTTAAATTC	1499								
DB	1440	ATTTAACGACTTATTAACCTCCACTCGAATGTCGCAATTCGATGATGAGTTTAAATTC	1499								
QY	1500	CAGAACTCATGAAATACAGCTGATGCTTATGCTAAAAATTTGGGCTACAAGCAAAATCT	1559								
DB	1500	CAGAACTCATGAAATACAGCTGATGCTTATGCTAAAAATTTGGGCTACAAGCAAAATCT	1559								
QY	1560	ATGTAGGGCTCTAAATGTATCAAAATCAAAACCTTCCACCATGAATGTAGATCCTCT	1619								
DB	1560	ATGTAGGGCTCTAAATGTATCAAAATCAAAACCTTCCACCATGAATGTAGATCCTCT	1619								
QY	1620	GTATTTCTAGCTATCATTTTCCGATCCAACTAGCTGAAAGATCGACCGCTCTAGACTA	1679								
DB	1620	GTATTTCTAGCTATCATTTTCCGATCCAACTAGCTGAAAGATCGACCGCTCTAGACTA	1679								
QY	1680	TGTTAGTGAAGAGAGAAAACTAACTATAGATACACATATTAGCATGTACCGTTAAA	1739								
DB	1680	TGTTAGTGAAGAGAGAAAACTAACTATAGATACACATATTAGCATGTACCGTTAAA	1739								
QY	1740	TTGAGCTTCCGTTATGTTATCTATACATACACACAGGTATCTACTATAAGAAATAAAGG	1799								
DB	1740	TTGAGCTTCCGTTATGTTATCTATACATACACACAGGTATCTACTATAAGAAATAAAGG	1799								
QY	1800	AAAGAAAAATAAACGATTAACATT	1825								
DB	1800	AAAGAAAAATAAACGATTAACATT	1825								

RESULT 2
US-09-248-796A-5807
; Sequence 5807, Application US/09248796A
; Patent No. 6747137
; GENERAL INFORMATION:
; APPLICANT: Keith Weinstock et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICANS
; FILE REFERENCE: 107196.132
; CURRENT FILING DATE: 1999-02-12
; PRIOR FILING DATE: 1998-02-13
; PRIOR FILING DATE: 1998-02-13
; PRIOR FILING DATE: 1998-02-13
; NUMBER OF SEQ ID NOS: 28208
; SEQ ID NO 5807


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; LENGTH: 1473
; TYPE: DNA
; ORGANISM: Candida albicans
; US-09-248-796A-5807

Query Match      19.4%; Score 354.4; DB 3; Length 1473;
Best Local Similarity 56.2%; Pred. No. 8.2e-76;
Matches 757; Conservative 0; Mismatches 541; Indels 48; Gaps 3;

Qy 362 TTCTCGACATCTTAATATCCCGTGGAATTAATCAATCTTCGGTTCGATTTGCCAAT 421
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
164 TTCTTGACTCACCATCAATTAATTTGAAAACAAATTAATTTGGTCTTACTATTGGCCAAT 223
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
422 TTCTTTTCCGATCTTACTTTGAGGTACACAGTACCAGAAGCTATCTGAAACAAGTTGC 481
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
224 ATGTTTTTCGAGCATTAATTTAGATCTTGACAAATATAGAGTGTCAACCTGAAACAGCAC 283
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
482 CACCTGTGCTCGAAGACGAATTTGATGATGAACATTTTTCATAAATCAAGGAATCTCC 541
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
284 CAAAGTCAATTTGAAAAGAAGTTTCACAAGAAACATTCGACAAATCCCAAGATATCCC 343
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
542 GGGCCAAAGCCCAAGTTCTCCATTTTTCGGTGAAGTCTATAAAGTCCCAAGCTAGTTT 601
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
344 GTGCTAAAGCACAGTTTTCAGTCTTTTCCAGTACGCTTTCAGCTTGTGTCAGAACTTGC 403
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
602 TCATCAATACGACCTCTTCCCTAAATCTGGCAGATGGCGTTCCTTTATTTGATGACAG 661
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
404 TCTTTAAATATGACTTTGTACCTAAACCTGGACATTTGGCTGGGACATCATGAAAGATA 463
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
662 TCCTGCCAGTCAGATTTTCATATGTTCTCCACTGTGCGACAGAGTTTATGCTTCTTGGT 721
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
464 GTGCTGACGTTTACCTAAGGCCATGAGTGGTGTATTAATCTCAATCGCTTTTGTGTT 523
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
722 TCTTATCC---AGTTTGTCTACCTTGGTGTGATTTGCCACTCTCTTACTATAGCCATTTG 778
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
524 TCACCACCAATCTTGACAACTTTGATGGATTAACCATTTGATTTACTTACAAAACCTTG 583
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
779 TCCTGGAGAANAATTTGGTTTCAATAATTTGACCGTCCAACTATGGATCCCGATAGA 838
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
584 TGTAGAGGAGATTTGGGATTTCAACAAGCAAACTTTGGTTGGGTAGCGATATGT 643
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
839 TCAAGAGTCTGACTTTGGCGTATGCTATTTGGTGGCCCAATCTTTACCTGTTCTTAA 898
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
644 TAAAGGAATTTGATATCTATAGTTTGGGATCCCGATTAATTCGCGATTTTGA 703
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
899 TCTTTGATAAATTCCTACTGATTTCTTTGGTACATTAATGCTCTCTTCTTGGTGTGTC 958
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
704 TTATTTGATTAATTTGATGATAAGTTCAATTTCTATCTCATGGGATTCATTTTAGT 763
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
959 AATCTTAGCCATGACATCAATCTCCAGTCTTCATCATGCCCATGTTTAAATAGTCACT 1018
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
764 ACTTGATTTGATGACCATAGTTTCAACATTTGATTTATGCCATTAATTAACAGTTT 823
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1019 CATTGGAGCGGTCAACTGAAAAATCTATTGAAAGTTTGGCCGATAGAGTTGGGTTC 1078
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
824 CTTTGAAGATGGTGAATTTGAAAACCGCATTTGAAAATTTAGCTTTAGAACAAAATCC 883
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1079 CTCTAGATAAGATTTTGTCTATGAGCGCTCAAAAAGATCTTCTCATTTCAAAACGAT 1138
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
884 CATTGACAAAATTTGTTGTCATTTGATGATCAAAAAGATCGTCCCATTTCAATGCTTAT 943
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1139 TCACAGGTTTGGCATTCACCTCCAGAGAAATTTTGTTCGACACTTTAGTGACAGTA 1198
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
944 TCACAGGATTTGCCATTTGA---GCAACAAATTTGTTTGTGACACTTTAATTTGAACA 1000
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1199 ATTCTACTGATGAATTAACGCTGTTTGGCCCATGAATCGGTCACTGGCAAAAAACC 1258
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1001 ATTCAACTGAAGAACTGTTGCTGCTTGGCTCATGAAATTTGGTCACTGGAAATTTGA 1060
Qy ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1259 ACATCGTTTAATATGCTATCTTTTAGTCAATTTGACACACCTTCTCTTCCCTTTTCA 1318
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1061 ATTTGCCAAAGATGATACCAATGATGATGCAAGGCAATTTGTTTGTGATTTTCTTGT 1120

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Qy 1319 CCAGCATCTACAGAAATACATCATTTTACAAACCTTCGGCTTTTCTTAGAGAAGTCCA 1378
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1121 CTGCTTTTCATTAACAACAAATCATATACACAAGTTTGGTGTGTC----- 1167
Qy 1379 CTGCGAGTTTGTGTGATCCCGTTATACACTAAGGAATTTCCCATTTATCATTTGATTTATGT 1438
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1168 -----AAGCAACAACCAATCTTGTATCGGATTTATGT 1198
Qy 1439 TATTTAAGGACTTATTAACCTCCACTCGAATGTGCGCAATTCGTGATGAGTTTAATTT 1498
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1199 TATTTCAACGACATTTTCCAACAGTGGATGTCTTTGACATTCGTCTGAACTTGATTT 1258
Qy 1499 CCAGAACTCATGATATCAAGCTGATCTTATGTGTAATAAATTTGGGCTACAAAGCAAAATC 1558
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1259 CAAGAAGCATGATATGAGGCCGACAAAGTATGTAGTACTGTGGATATTTCTGAGGAAT 1318
Qy 1559 TATGTAGGCTCTAATTTGATCTACAAATCAAAATCAAAACCTTTCCACCATGATGATGATCCTC 1618
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1319 TGACGAGATCTTTGATCAAGTTATCCAAATGAAACTTTGTCAAGTATGAATGCCGATTTG 1378
Qy 1619 TGTATTTCTAGCTATCATTTATTTCCCATCCACTCTAGCTGAAAGATCGACCGCTCTAGACT 1678
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1379 TGTITTCCTCTTACCATTTTCTCATCTATTTATACCAGAAAGATTAAGTGCATTTGGGT 1438
Qy 1679 ATGTTAGTGAAGAAAGAAAGAAACTAA 1704
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1439 ACGTTTCAAGGTTAAAGTTAAGAA 1464

RESULT 3
US-08-998-416-929/c
; Sequence 929, Application US/08998416
; Patent No. 6239264
; GENERAL INFORMATION:
; APPLICANT: Philippsen, Peter
; APPLICANT: Pohmann, Rainer
; APPLICANT: Steiner, Sabine
; APPLICANT: Mohr, Christine
; APPLICANT: Wendland, Jurgen
; APPLICANT: Knechtle, Philipp
; APPLICANT: Reibschung, Corinne
; TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPHII
; TITLE OF INVENTION: AND USES THEREOF
; NUMBER OF SEQUENCES: 1152
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 6239264artis Corporation
; STREET: 3054 Cornwalis Road
; CITY: Research Triangle Park
; STATE: No. 6239264th Carolina
; COUNTRY: USA
; ZIP: 27709
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,416
; FILING DATE: 24-DEC-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: CH 0016/97
; FILING DATE: 31-DEC-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Meigs, J. Timothy
; REGISTRATION NUMBER: 38,241
; REFERENCE/DOCKET NUMBER: PF/5-30306/A/CGC1976
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-541-8587
; TELEFAX: 919-541-8689
; INFORMATION FOR SEQ ID NO: 929:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 686 base pairs

```

```
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; ORIGINAL SOURCE:
; ORGANISM: PAG1577RP
US-08-998-416-929

Query Match          7.5%; Score 136; DB 3; Length 686;
Best Local Similarity 52.1%; Pred. No. 3.5e-23;
Matches 354; Conservative 0; Mismatches 320; Indels 6; Gaps 2;

Qy 490 CTGGAAGACAAATGATGATGAATCTTTTATCAATCAAGGAATCTCCCGGGCAAG 549
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 675 CTGGAGGGCTTATGATGAAGAAACAATGCAAGACGAGCGTACGAGGGGCAAG 616
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 550 GCCAAGTCTTCCATTTTCGGTGACGCTCTATAACCTAGCCCAAAAGCTAGTTTTCATCAA 609
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 615 TAACGCTACCGTATGGTTAGAGATCTGGTCTCCTGGACTAAATCTGGTAATGATTAAAG 556
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 610 TAGCACTCTTCCCTAAATCTGGACATGGCCGCTTCTTTATTGATGACGAGTCTGCCA 669
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 555 TAGCACTGGCTGCACCGATGTGGAACTTAGGACCTAGGAGTGGCGTAGGTGAGCG--CATGCC 499
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 670 GTGAGATTTTCATATGGTCTCCACTGTCGACAGAGTTTATGCTTCTTGGTCTCTTATCC 729
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 498 GCATGCTGTGCAGTATCGACATCTCGAGTCTGCTTCTTGTATGCTCTACCTA 439
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 730 AGTTTGTCTACCTTGTGTTGATTGTTGCCACTCTCTTACTATAGCCATTTTGTCTGGAAGAA 789
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 438 CAGCTGAACCTGGTGGCAGGGGTTGTTGGGAGCTATTACTACAACATTTTGTGCTCGAGGAA 379
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 790 AAATTTGGTTTCAATAAATGACGCTCAACTATGATACCGATATGATCAAGAGTCTG 849
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 378 AAATTCGGGTTCAACAGTCCACGGTCAAGCTATGGCTAAGCAGCAGCTAANAAGTGT 319
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 850 ACTTTGGCGTATGCTATTGTGGGCCCAATCCTTTACCTGTTCTTAAGATCTTTGATAA 909
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 318 ATGATCTCTCCATGATTACCACTCTCTGAGCCTATGCGCTGTGAAGTAAATGAAAG 259
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 910 TTCCCTACTGATTTCTTTTGGTACATPATGCTCTCTTTGTCGTTGTCGATTTTCAAAATCTTAGCC 969
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 258 TTCTCGACTGGCTTCGTCAGTCTCTATCTGATGCTGTTCTTCTATCTGCTGCTG 199
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 970 ATGCAATCATTCAGTCTTCATCATGCCCATGTTTAAATGATTCATCCATTTGGAGGAC 1029
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 198 ACTGCTCTTCAGCCAGT---TTACAGCTTTATTCAACAAGCTCACCCCGTTGGAGAC 142
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 1030 GGTGAACGTGAAAAATCTATTGAAAGTTTGGCCGATAGAGTTGGGTTCCCTCTAGATAAG 1089
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 141 GGGAGCTGAAGAGCTGATGTGCAATTAAGCAACAGTCAACTTCCCACTGGACAA 82
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 1090 ATTTTGTGATGAGGCTCAAAAGATCTTCTCATTTCAACGCAATTTTCAAGGTTTG 1149
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 81 ATCTACCTTTTCGGACGGCTCGCGCGCTCTGGGCACTCAATGGTATTTTCAACGGGCTA 22
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 1150 CCATTACCTCCAGAGAAAT 1169
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 21 CCGTTTCTCTAAACGGAT 2
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

RESULT 4
US-09-022-699-1
; Sequence 1, Application US/09022699
; Patent No. 6060277
; GENERAL INFORMATION:
; APPLICANT: KIKLY, KRISTINE
; APPLICANT: SOUTHAN, CHRISTOPHER
; APPLICANT: KNAB, ANNE
; TITLE OF INVENTION: Human AFl1
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: RATNER & PRESTIA
```

```
; STREET: P.O. BOX 980
; CITY: VALLEY FORGE
; STATE: PA
; COUNTRY: USA
; ZIP: 19482
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/022,699
; FILING DATE: 12-FEB-1998
; CLASSIFICATION:
; PRIOR APPLICATION NUMBER: 97304440.7
; FILING DATE: 12-JUN-97
; ATTORNEY/AGENT INFORMATION:
; NAME: PRESTIA, PAUL F
; REGISTRATION NUMBER: 23,031
; REFERENCE/DOCKET NUMBER: GH-70380
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610-407-0700
; TELEFAX: 610-407-0701
; TELEX: 846169
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2968 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cdna
US-09-022-699-1

Query Match          6.4%; Score 117.4; DB 3; Length 2968;
Best Local Similarity 50.5%; Pred. No. 1.7e-18;
Matches 370; Conservative 0; Mismatches 351; Indels 12; Gaps 3;

Qy 471 AACCAAGTTGCCACCTGTCTGSAAGACGAAATGTATGATGAACATTTTTCATAAATCAAG 530
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 177 AACTCATGTACACCGGAGTTAGGACAGATCATGGAATCTGAAACATTTTGAGAAATCTCG 236
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 531 GAACACTACCCCGGCCAAGGCTTCCATTTTCGGTGAGCTATAAACCCTAGCCCA 590
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 237 ACTCTATCAACTGGATAAAGACACTTTTCAGTCTCTGTCAGGACTCTATTTCAGAGACTGA 296
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 591 AAGCTAGTTTTCATCAAAATAGACCTCTTCCCTAAATCTGGACATGCGCGTTCTTT 650
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 297 AGGCACTCTTATTTCTCTTTTGGAGGAATACCTTATCTCTGGAGACTTTCTGGACGGTT 356
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 651 ATTGAATGCAGTCTGCCAGTCAGATTTTCATATGGTCTCCACTGTCCGACAGAGTTTATG 710
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 357 CT--GTGGTATGCTGGCTTTGGACAGAAATATGAGATCACTCAGTCCCTGGTGTCTG 414
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 711 CTTCTTGGGTCTCTTATCCAGTTTGTCTACCTTGGTTGATTTGGCCACTCTCTTACTATAG 770
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 415 CTGTTGCTAGACT-----TTTCAGTGCAATTGACTGGTTTGGCCATGGAGTCTTTATAA 467
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 771 CCATTTTGTCTGGAAAGAAAAATTTGGTTTCAATAAATTGACCGTCCAACTATGGATCAC 830
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 468 TACTTTTGTGATAGAAAAAACATGGCTTCAATCAACAGACTTTGGGGTCTTCTCATGAG 527
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 831 CGATATGATCAAGAGTCTGACTTTTGGCGTATGCTATTGGTGGGCCCAATCTTTTACCTGTT 890
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 528 AGATGCAATCAAGAAATTTGTGTGACTCAGTGATTTTGTGGCTGTGCTTCACTTCT 587
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 891 CCTTAAGATCTTTGATAAATTCCTACTGATTTCCCTTTGGTACATTATATGGTCTTCTTGT 950
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 588 ACTTTTACATTATTAAAAATTTGGGGGTGACTATTTTTTTTATTATGCGCTGCTTTCACATT 647
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 951 CGTTGTCCAAATCTTGGCCATGACATCATTCAGTCTTCATCATGCCCATGTTTATAA 1010
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 648 AGTTGTGCTCTCGTCTTGTGTCAAATCTATGCTGATTAATTATGCCCCCTTTATTGACAA 707
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
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Qy 1011 GTTCACTCCATTGGAGGCGGTGAAGTCAAAATCTATTGAAGTTTGGCGGATAGT 1070
 Db 708 ATTACACCTCTGCTGAGGAAAGCTTAAAGAAATTAAGTAATGGCAAGAGAT 767
 Qy 1071 TGGGTTCCTCTAGATAGATTTTGTGTCATTCAGCGCTCAAAAGATCTTCTCAATCAAA 1130
 Db 768 TGACTTTCTTTGACGAGGCTGATGTTGTGGAAGATCTAAACGCTCTTCCACAGCAA 827
 Qy 1131 CGCATATTCACAGTTTGGCAATCACTCCAAAGAGAAATGTTTGTTCGACACTTTAGT 1190
 Db 828 TGCTTTATTTATGGCTT---CTTCAAGACAAGCGAATAGTTTGTGTTGACACTTACT 884
 Qy 1191 GAACAGTAATCT 1203
 Db 885 AGAGAGTACTCT 897

RESULT 5

US-09-533-559-7530
 ; Sequence 7530, Application US/09533559
 ; Patent No. 6902887
 ; GENERAL INFORMATION:
 ; APPLICANT: Randy M. Berka
 ; APPLICANT: Michael W. Rev
 ; APPLICANT: Jeffrey R. Shuster
 ; APPLICANT: Sakari Kauppinen
 ; APPLICANT: Ib Groth Clausen
 ; APPLICANT: Peter Bjørke Olsen
 ; TITLE OF INVENTION: Methods For Monitoring Multiple Gene
 ; FILE REFERENCE: 5849.200-US
 ; CURRENT APPLICATION NUMBER: US/09/533,559
 ; EARLIER FILING DATE: 2000-03-22
 ; EARLIER APPLICATION NUMBER: 09/273,623
 ; EARLIER FILING DATE: 1999-03-22
 ; NUMBER OF SEQ ID NOS: 7860
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 7530
 ; LENGTH: 684
 ; TYPE: DNA
 ; ORGANISM: Tricoderma reesei
 ; FEATURE:
 ; NAME/KEY: misc_feature
 ; LOCATION: (1)...(684)
 ; OTHER INFORMATION: n = A,T,C or G
 ; US-09-533-559-7530

Query Match 4.8%; Score 88.2; DB 3; Length 684;
 Best Local Similarity 53.8%; Pred. No. 1.2e-11;
 Matches 217; Conservative 0; Mismatches 184; Indels 2; Gaps 2;
 Qy 752 TGCCACTCTCTTACTATAGCCATTTTGTCTCGAAGAAAAATTTGGTTTCAATAATGA 811
 Db 221 TGCCACCGCATCTACAGCACTTTGTCTCGAGGAGATTTGGCTTCAACAGCAGA 280
 Qy 812 CGGTCCAACTATGATACCGATATGATCAAGAGTCTGACTTGGCGGTATGCTATTGGTG 871
 Db 281 CGCCGGGCTCTTCATCTCCGACATGGTCAAGACCAACCTGCTCACGCGCGCTCCTCATGC 340
 Qy 872 GCCCAATCTTTACTGTTCTCTTAGATCTTGTAAATCCCTACTGATTTCTTTGGT 931
 Db 341 CCGCATCTCGCGGTTTCTCAAGATCATCCAGAGACGGGCTCGCAGTTTGTCTTCT 400
 Qy 932 ACATTATGCTCTTCTTGTGTTGTGTCGTAATCTTAGCCATGACATCAATTCAGCTTTCA 991
 Db 401 ACACCTGGGCTTCTTACTCCCGGCATCCAGCTCCTGATGACTACCTCTACCCACCTTCA 460
 Qy 992 TCATGCCCATGTTTAAATAGTTCACTCAATGGAGGACGGTGAACCTGAAAAATCTATTG 1051
 Db 461 TCCAAACC-TGTTCAACAAGCTCTCCCCCTCGAGGACGGAGCTTCAAGACCAANGTC 519
 Qy 1052 AAAG-TTTGGCGGATAGAGTTGGGTTCCTCTAGATAGATTTTGTGTCATTGACGGCTCA 1110

Db 520 AATGAATGGGCGCCCTTCAAGTTCCCTCGACGAAGTGTATGTCAATGATGGTAGC 579
 Qy 1111 AAAAGATCTTCTCTATTCAAGCGATATTTACAGGTTTGCCAT 1153
 Db 580 AAGCGCAGNCTCACTTCAAGCGCTTTTCTACNGGCTCCGT 622

RESULT 6

US-09-533-559-454
 ; Sequence 454, Application US/09533559
 ; Patent No. 6902887
 ; GENERAL INFORMATION:
 ; APPLICANT: Randy M. Berka
 ; APPLICANT: Michael W. Rev
 ; APPLICANT: Jeffrey R. Shuster
 ; APPLICANT: Sakari Kauppinen
 ; APPLICANT: Ib Groth Clausen
 ; APPLICANT: Peter Bjørke Olsen
 ; TITLE OF INVENTION: Methods For Monitoring Multiple Gene
 ; FILE REFERENCE: 5849.200-US
 ; CURRENT APPLICATION NUMBER: US/09/533,559
 ; EARLIER FILING DATE: 2000-03-22
 ; EARLIER APPLICATION NUMBER: 09/273,623
 ; EARLIER FILING DATE: 1999-03-22
 ; NUMBER OF SEQ ID NOS: 7860
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 454
 ; LENGTH: 649
 ; TYPE: DNA
 ; ORGANISM: Fusarium venenatum
 ; FEATURE:
 ; NAME/KEY: misc_feature
 ; LOCATION: (1)...(649)
 ; OTHER INFORMATION: n = A,T,C or G
 ; US-09-533-559-454

Query Match 4.4%; Score 79.8; DB 3; Length 649;
 Best Local Similarity 53.7%; Pred. No. 1.3e-09;
 Matches 187; Conservative 0; Mismatches 158; Indels 3; Gaps 1;
 Qy 1033 GAACTGAAAAAATCTATTGAAAGTTTGGCGGATAGAGTTGGGTTCCCTCTAGATAAGATT 1092
 Db 1 GAGCTCAAGACCACAGGTTGAATCTCTTGGCGGAGCTCAAGTTCCCTCGACGAGCTC 60
 Qy 1093 TTTGTCATTGACGGCTCAAAAAGATCTTCTCATTTCAACCGATATTTCAACAGGTTTGCCA 1152
 Db 61 TACGTCATCGATGGAAGCGAAGCGCCCACTCAAAACGCTATTTCTTTGGTCTTCCC 120
 Qy 1153 TTCACTCCAGAGAAATTTTGTTCGACACTTTAGTGACAGTAATTTCTACTGATGAA 1212
 Db 121 TGAAG---AAGCACATTTGATCTAGGATCTGATGATGANAAGAGGAGCCCGATGAG 177
 Qy 1213 ATTACGGCTGTTTGGCCCATGAAATCGGTCACTGGCAAAAAACCATCGTTTAATATG 1272
 Db 178 GTCGTGCGGTTCTTGGCAGAGTTGGTCACTGGAAGCTTGGCCATCTACCACTC 237
 Qy 1273 GTCACTTTAGTCAATTTGACACCTTCCTCATTTTCTCCCTTTTCCAGCATCTACAGA 1332
 Db 238 TTCGGTATCTCTCAGGCTCACTCTTTACATCTTCTCTCTCTCTCTCTCTCTCAAC 297
 Qy 1333 AATACATCAATTTTACAACACCTTCGGCTTTTCTTAGAGAGTCCACT 1380
 Db 298 AACCACTCTGTACTCATCTTTCGGTTTCTTCAAGAGATCCCAAT 345

RESULT 7

US-09-949-016-172190/c
 ; Sequence 172190, Application US/09949016
 ; Patent No. 6812339
 ; GENERAL INFORMATION:
 ; APPLICANT: VENTER, J. Craig et al.

```

; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASES, METHODS OF DETECTION AND USES THEREOF
;
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 172190
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-172190

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Query Match	3.0%;	Score 54.6;	DB 3;	Length 601;
Best Local Similarity	54.8;	Pred. No. 0.0015;		
Matches 108;	Conservative 0;	Mismatches 89;	Indels 0;	Gaps 0;
Qy	38	TACACACACACATACATCTACATACATACATACACAAATATACATATATGTAACATTG	97	
Db	201	TACACATATACATATATATACACACATATATATACATATATGACACACA	142	
Qy	98	TATATTCAATTCCTATTAAACAAAAGAGGCAATTAACCTTTCCCTCTTTTTCTACGTCA	157	
Db	141	TACCTGCAGAAATCAGAATCCAAATTTCAAATCTTTGTGCTATCATCTTTGTTTGSTGA	82	
Qy	158	TTTACTCAAAAACCTAATTCCTTCGTCTGTGTTCTGCACTTTTCTCCAGAAAAAATCG	217	
Db	81	TTTTTGACAAAAGAAATTAAGCCGAGGACTCTCCTACTCCAATTTCCTTAGAGCCAGTCA	22	
Qy	218	ACGGGAATAAAAAAA	234	
Db	21	TCAAGATAGAAAGTAA	5	

RESULT 8
US-09-949-016-172191/c
; Sequence 172191, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 172191
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-172191

	Query Match	3.0%	Score 54.6;	DB 3;	Length 601;
	Best Local Similarity	54.8%;	Pred. No. 0.0015;		
	Matches 108; Conservative	0;	Mismatches 89;	Indels 0;	Gaps 0;
Oy	38	TACACACACACATCATCTCTACATACATACATACAAAATATACATATATGTGAACTTG	97		
Dd	220	TACACACATATACATATATATATATACACACATATATATATATATGCACACA	161		

Qy 98 TATATTCAATTCCCTATTATACCAAAAGAGGCAATTTAAACTTTTCCCTCTTTTCTACGGTCA 157
Db 160 TACTCGGAAATCAGAAATCAATTTCAAATCTTTGTGTCATCATCTTTGTGTGGTGA 101
Qy 158 TTACTCAAAAATCTCAATTTCTTCGTCCTGTCTCGCAATTTTCTCCAGAAAAAATCG 217
Db 100 TTTTGTACCAAGAAATTTAAGCCAGGACTCTCTACTCCAATTTCTTAGAGCCAGTCA 41
Qy 218 ACGGGAAATAAAAAAA 234
Db 40 TCAAGATAGAAAAGTAA 24

RESULT 9
US-09-949-016-172192/c
; Sequence 172192, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CLO01307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 172192
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-172192

Query Match	3.0%;	Score 54.6;	DB 3;	Length 601;
Best Local Similarity	54.8%;	Pred. No. 0.0015;		
Matches 108;	Conservative	0;	Mismatches 89;	Indels 0; Gaps 0;
QY	38	TACACACACACACATACATCTACATACATACATACACAAATATACATATATGTAACCTTG	97	
DB	253	TACACACATATATATATATATACACACACATATATATATATACATATATGCACACACA	194	
QY	98	TATATTCAATTCCTATTACCAAAAAGAGGCAATTHAACTTTTCCTCTTTTCTTAGGTCA	157	
DB	193	TACCTGCAGAAATCAGAAATCCAATTTCAAAATCTTTGTCTATCATCTTTCTTTGGTGA	134	
QY	158	TTTACTCAAAAACCTCAATTCCTCGTCTCTGTTCTGCGCATTTTCTCCAGAAAAAATCG	217	
DB	133	TTTTTGACCAAGAATTAAGCCAGGACTCTCCTACTCCAATTTCTTAGAGCCCAGTCA	74	
QY	218	ACGGGAATATAAAAAA	234	
DB	73	TCAAGATAGAAAAGTAA	57	

RESULT 10
US-09-949-016-172193/c
; Sequence 172193, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768

Search completed: December 8, 2005, 18:38:13
Job time : 323.593 secs

```
RESULT 15
US-08-988-197-8
; Sequence 8, Application US/08988197
; Patent No. 6548065
; GENERAL INFORMATION:
; APPLICANT: Anderson, Dirk M
; APPLICANT: Giri, Judith G
; TITLE OF INVENTION: Interleukin-15 Receptors
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Immunex Corporation
; STREET: 51 University Street
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98101
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: Apple Macintosh
; OPERATING SYSTEM: Apple Operating System 7.1
; SOFTWARE: Microsoft Word for Apple, Version 5.1a
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/988,197
; FILING DATE:
; CLASSIFICATION: 121097
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/300,903
; FILING DATE: 06-SEPTEMBER-1994
; APPLICATION NUMBER: USSN 08/236,919
; FILING DATE: 06-MAY-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Perkins, Patricia Anne
; REGISTRATION NUMBER: 34,695
; REFERENCE/DOCKET NUMBER: 2822-A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 206-587-0430
; TELEFAX: 206-233-0644
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1641 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 3..839
; US-08-988-197-8

Query Match      2.8%; Score 51.6; DB 3; Length 1641;
Best Local Similarity 52.3%; Pred. No. 0.011;
Matches 114; Conservative 0; Mismatches 104; Indels 0; Gaps 0;

QY 101 ATTCATTCCTATTAAACCAAGAGGCAATTAACATTTTCCCTCTTTTCTACGTCATTT 160
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1424 ACTCAGTGCCTTTTACGAATATATGCGTTTATATTACTTCTCCTGCTATTATATCT 1483

QY 161 ACTCAAAACTCTAATCTCTGTTCTGTTCTGCCATTTTCTCCAGAAAAAATCGACG 220
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1484 ATACATTATATATTATTGTTATTTTGACATTTGTACCTTGATATAACAAAAATAAACATCT 1543

QY 221 GGAAATAAAAAAAGACACACGACCAAGAGAAAAAGTTCGCGAATTTATAAACCATTC 280
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1544 ATTTTCATATAAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAA 1603

QY 281 TATAATTAAACAGGAAGAGGAAAAAGGAGGAA 318
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1604 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1641
```

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Result No.	Score	Query		DB	ID	Description
		Match	Length			
1	1825	100.0	1825	7	US-10-646-950-1	Sequence 1, Appl
2	143.6	7.9	1275	6	US-10-210-760A-21	Sequence 21, Appl
3	143.6	7.9	1275	6	US-10-229-541A-116	Sequence 116, Appl
C 4	143	7.8	5544	6	US-10-210-760A-35	Sequence 35, Appl
C 5	143	7.8	5544	6	US-10-229-541A-130	Sequence 130, Appl
C 6	143	7.8	5668	6	US-10-210-760A-38	Sequence 38, Appl
C 7	143	7.8	5668	6	US-10-229-541A-133	Sequence 133, Appl
8	139	7.6	1275	6	US-10-210-760A-1	Sequence 1, Appl
C 9	139	7.6	1275	6	US-10-210-760A-97	Sequence 20, Appl
C 10	139	7.6	1275	6	US-10-229-541A-97	Sequence 97, Appl
C 11	139	7.6	1275	6	US-10-229-541A-115	Sequence 115, Appl
12	139	7.6	5074	6	US-10-210-760A-39	Sequence 39, Appl
13	139	7.6	5074	6	US-10-229-541A-134	Sequence 134, Appl
14	139	7.6	5544	6	US-10-210-760A-4	Sequence 4, Appl
15	139	7.6	5544	6	US-10-229-541A-99	Sequence 99, Appl
16	139	7.6	5668	6	US-10-210-760A-36	Sequence 36, Appl
17	139	7.6	5668	6	US-10-229-541A-131	Sequence 131, Appl
18	138.8	7.6	1275	6	US-10-210-760A-23	Sequence 23, Appl
19	138.8	7.6	1275	6	US-10-229-541A-118	Sequence 118, Appl
20	137.2	7.5	1275	6	US-10-210-760A-29	Sequence 29, Appl
21	137.2	7.5	1275	6	US-10-229-541A-124	Sequence 124, Appl
22	127.8	7.0	1275	6	US-10-210-760A-14	Sequence 14, Appl
C 23	127.8	7.0	1275	6	US-10-210-760A-16	Sequence 16, Appl

Db 241 ||||| AACGAACAAGAAAAGTTGCGCAATTAATAACCACTTCTATAATTAACAGAAAGGA 300
Qy 301 AGAAAAAAGAGAAATAGAAAACTCGAGCCCTTTATTCATGTTTGAATCTTAAGACG 360
Db 301 AGAAAAAAGAGAAATAGAAAACTCGAGCCCTTTATTCATGTTTGAATCTTAAGACG 360
Qy 361 ATTCTCGACCATCTTAATATCCCGTGGAAATTAATCATTTCTGGGTTCGATTCGCCAA 420
Db 361 ATTCTCGACCATCTTAATATCCCGTGGAAATTAATCATTTCTGGGTTCGATTCGCCAA 420
Qy 421 TTTTCTTTTCCAAATCTTACTTTGACGTACAGACAGTACAGAAAGCTATCTGAAAACAAAGTTG 480
Db 421 TTTTCTTTTCCAAATCTTACTTTGACGTACAGACAGTACAGAAAGCTATCTGAAAACAAAGTTG 480
Qy 481 CCACCTGTGCTGGAAGACGAAATTTGATGATGAAACTTTTTCATAAATCAAGGAACACTACTCC 540
Db 481 CCACCTGTGCTGGAAGACGAAATTTGATGATGAAACTTTTTCATAAATCAAGGAACACTACTCC 540
Qy 541 CGGGCCAAAGCCCAAGTTCTCCATTTTCGGTGACGTCTATAACCTAGCCCAAAAGCTAGTT 600
Db 541 CGGGCCAAAGCCCAAGTTCTCCATTTTCGGTGACGTCTATAACCTAGCCCAAAAGCTAGTT 600
Qy 601 TTTTCAATACAGACCTCTTCCCTAAATCTGGCACAATGGCCCGTTCTTTTATTGAATGCA 660
Db 601 TTTTCAATACAGACCTCTTCCCTAAATCTGGCACAATGGCCCGTTCTTTTATTGAATGCA 660
Qy 661 GTCTGCGACGTAGATTTATATGTTCTCCACTGTGCGACAGAGTTTATGCTTCTTGGGT 720
Db 661 GTCTGCGACGTAGATTTATATGTTCTCCACTGTGCGACAGAGTTTATGCTTCTTGGGT 720
Qy 721 CTCTTATCCAGTTTGTCTACTTGGTTGATTTGGCACTCTTACTATAGCCATTTTGTG 780
Db 721 CTCTTATCCAGTTTGTCTACTTGGTTGATTTGGCACTCTTACTATAGCCATTTTGTG 780
Qy 781 CTGGAAGAAAAATTTGGTTTCAATAAATTCACCGTCCAACTATGGATCACCGATATGATC 840
Db 781 CTGGAAGAAAAATTTGGTTTCAATAAATTCACCGTCCAACTATGGATCACCGATATGATC 840
Qy 841 AAGAGTCTGACTTTGGCGTATGCTATTTGGTGGCCCAATCTTTACCTGTTCTTTAAGATC 900
Db 841 AAGAGTCTGACTTTGGCGTATGCTATTTGGTGGCCCAATCTTTACCTGTTCTTTAAGATC 900
Qy 901 TTTGATAAATTCCTACTGATTTCTTTGTTGATATGCTTCTGTTCTGTTGTTGCCAA 960
Db 901 TTTGATAAATTCCTACTGATTTCTTTGTTGATATGCTTCTGTTCTGTTGTTGCCAA 960
Qy 961 ATCTTAGCCATGACAAATCATTCAGTCTTCTCATATGCGCCATGTTTAAATAAGTTCACTCCA 1020
Db 961 ATCTTAGCCATGACAAATCATTCAGTCTTCTCATATGCGCCATGTTTAAATAAGTTCACTCCA 1020
Qy 1021 TTGGAGACGGTGAATCTGAAAAATCTATTGAAAGTTTGGCCGATAGAGTTGGGTTCCCT 1080
Db 1021 TTGGAGACGGTGAATCTGAAAAATCTATTGAAAGTTTGGCCGATAGAGTTGGGTTCCCT 1080
Qy 1081 CTAGATAAGATTTTGTTCATGACGCTCAAAAGATCTTCTCATTTCAAACGATATTTTC 1140
Db 1081 CTAGATAAGATTTTGTTCATGACGCTCAAAAGATCTTCTCATTTCAAACGATATTTTC 1140
Qy 1141 ACAGGTTTGCATTCACCTCCAGAGAAATTTGTTTGTTCGACACTTTTAGTGAACAGTAAT 1200
Db 1141 ACAGGTTTGCATTCACCTCCAGAGAAATTTGTTTGTTCGACACTTTTAGTGAACAGTAAT 1200
Qy 1201 TCTACTGATGAAATTAAGGCTGTTTTGGCCCATGAAATCGGTCTACTGGCAAAAAAACAC 1260
Db 1201 TCTACTGATGAAATTAAGGCTGTTTTGGCCCATGAAATCGGTCTACTGGCAAAAAAACAC 1260
Qy 1261 ATCGTTAATATGGTCACTTTTAGTCAATTCGACACTTCTCTCAATTTCTCCCTTTTCAAC 1320
Db 1261 ATCGTTAATATGGTCACTTTTAGTCAATTCGACACTTCTCTCAATTTCTCCCTTTTCAAC 1320
Qy 1321 AGCATCTACAGAAATACATCTTTTACAAACCTTCGGCTTTTCTTAGAGAAAGTCCACT 1380

Db 1321 AGCATCTACAGAAATACATCTTTTACAAACCTTCGGCTTTTCTTAGAGAAAGTCCACT 1380
Qy 1381 GGCAGTTTGTGATCCCGTTATCACTAAGGAATTTCCCAATTTATCATTTGGAATTTATGTTA 1440
Db 1381 GGCAGTTTGTGATCCCGTTATCACTAAGGAATTTCCCAATTTATCATTTGGAATTTATGTTA 1440
Qy 1441 TTTTAAAGCTTATTAACTCCACTCGAATGTGCGATGCAATTCGTGATGAGTTTAAATTTCC 1500
Db 1441 TTTTAAAGCTTATTAACTCCACTCGAATGTGCGATGCAATTCGTGATGAGTTTAAATTTCC 1500
Qy 1501 AGAATCTATGAATATCAAGCTGATCTTATGCTAAAAAATTTGGGCTACAAAGCAAAATCTA 1560
Db 1501 AGAATCTATGAATATCAAGCTGATCTTATGCTAAAAAATTTGGGCTACAAAGCAAAATCTA 1560
Qy 1561 TGTAGGGCTCTAAATTTGATCTCAAAATCAAAACCTTTCCACCATGAATGTAGATCCTCTG 1620
Db 1561 TGTAGGGCTCTAAATTTGATCTCAAAATCAAAACCTTTCCACCATGAATGTAGATCCTCTG 1620
Qy 1621 TATTTCTAGCTATCATTTATTTCCCATCCAATCTAGCTGAAAGATCGACCGCTCTAGACTAT 1680
Db 1621 TATTTCTAGCTATCATTTATTTCCCATCCAATCTAGCTGAAAGATCGACCGCTCTAGACTAT 1680
Qy 1681 GTTAGTGAAGAAAGAAAGAACTAAATCTATAGAGTACACATATTAGCATGTACCGTTAAAT 1740
Db 1681 GTTAGTGAAGAAAGAAAGAACTAAATCTATAGAGTACACATATTAGCATGTACCGTTAAAT 1740
Qy 1741 TCAGCTTCTGTTATGCTATATCTACATACATACAGAGTATCTACTATAGGATTAAGGA 1800
Db 1741 TCAGCTTCTGTTATGCTATATCTACATACATACAGAGTATCTACTATAGGATTAAGGA 1800
Qy 1801 AAGAAAAAATAAACGATTAACATTT 1825
Db 1801 AAGAAAAAATAAACGATTAACATTT 1825

RESULT 2

US-10-210-760A-21
; Sequence 21, Application US/10210760A
; Publication No. US20030204865A1
; GENERAL INFORMATION:
; APPLICANT: Wan, Jiangxin
; APPLICANT: Huang, Yafan
; APPLICANT: Delina Campbell, Mary-Jane
; APPLICANT: Kuzma, Monika Maria
; APPLICANT: Gilley, Angela Patricia
; TITLE OF INVENTION: Caax prenyl protease nucleic acids and polypeptides and
; FILE REFERENCE: 22542-009
; CURRENT APPLICATION NUMBER: US/10/210,760A
; CURRENT FILING DATE: 2002-08-01
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-10-210-760A-21

Query Match 7.9%; Score 143.6; DB 6; Length 1275;
Best Local Similarity 48.8%; Pred. No. 9.5e-25;
Matches 468; Conservative 0; Mismatches 449; Indels 45; Gaps 1;
Qy 700 CAGAGTTTATGCTTTTGGGTCTCTTATCCAGTTTGTCTACCTTGGTTGATTTGCCACTC 759
Db 319 CATACTCTTTCATCTTGGCTGGTGTATGACATGTGCACATCACTGATTTGCCATTT 378
Qy 760 TCTTACTATAGCCATTTTGTCTGGAGAAAAATTTGGTTTCAATTAATTTGACCGTCAA 819
Db 379 TCTTGTACTCAACTTTTGTGATCGAGTCTCGGCATGGGTTCAACAAACAATATGG 438

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QY 820 CTATGGATACCGGATATGATCAAGAGTCTGACTTTGGGTATGCTATTGGTGGCCCAATC 879
Db 439 ATGTTCAATAGGAGATGATCAAGAGAAATTCCTCTCTGTGATAGGCCCCCAATC 498
QY 880 CTTTACCTGTTTCCCTTAAGATCTTTGATAAATCCCTACTGATTTCCCTTTGGTACATATG 939
Db 499 GTTGGCGGATATTTTCATAGTCCAGAAAGAGGTCTTATCTTGGCCATCTAICTGFG 558
QY 940 GTCCTTTGTTGGTTCCTTCCAAATCTTAGCCATGACAATCATTTCCAGTCTTTCATATGCC 999
Db 559 GCATTCATGTTTATCTCTCTAGTATGATGACTATATACCCGGTCTTGATAGCACCG 618
QY 1000 ATGTTTATAGTTTCACTCCATTTGAGGACGGTGAACCTGAAATAATCTATTGAAAGTTTG 1059
Db 619 CTCCTTCAACAAGTTTCACTCCCTCTCCAGATGGAGACCTCCGGGAGAAATTTGAGAAAT 678
QY 1060 GCCGATAGTTGGGTTCCCTCTAGATAAGATTTTTGTCAATGACGGCTCAAAAAGATCT 1119
Db 679 GCTTCTTCTTAAGTTTCCCTTTGAGAGAGCTGTTTGTGTCGATGATCTACAAGGTCA 738
QY 1120 TCTCATTCAAACGATATTTTCAAGTTTGGCATTCACCTCCAAAGAGAAATTTGTTTGTTC 1179
Db 739 AGCCATAGCAATGCTTTACATGATGCTTTCTTTAAGAACAAAGAGATTTGTTCTTTATGAT 798
QY 1180 GACACTTTAGTGAACAGTAATTTCTACTGATGAATTTAGCTGTTTGGCCCATGAATTC 1239
Db 799 ACGTTGATTCAGCAGTGAAGAAATTTGAGGAGTGAATTTGAGAAATTTGAGAAATTT 858
QY 1240 GGTCACTGGCAAAAACCAATCTGATGAATTTAGCTGTTTGGCCCATGAATTC 1299
Db 799 ACGTTGATTCAGCAGTGAAGAAATTTGAGGAGTGAATTTGAGAAATTTGAGAAATTT 858
QY 1300 CTCATTTTCTCCCTTTTCCAGAACTCATGAATATCAAGTGTATGCTTTATGCTTAAAAA 1539
Db 1054 TTTGGCCTCAACCTTTGTTAGTCGAGCGTTTGAGTTTTCAGGCTGATGCTTTTGTCTGTAAG 1113
QY 1540 TTGGGCTACAGCAAAAATCTATGAGGCTCTAATTTGATCTACAATCAAAAACCTTTCC 1599
Db 1114 CTTGGCTATGCAAAAAGATCTTCGCTCTACTCTAGTGAACCTACAGGAAGAGAACTTATCA 1173
QY 1600 ACCATGAATGATAGCTCTGATTTCTAGCTATCATTTATCCATCCCAACTCTAGCTGAA 1659
Db 1174 GCAATGAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1233
QY 1660 AG 1661
Db 1234 AG 1235

```

RESULT 3

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; US-10-229-541A-116
; Sequence 116, Application US/10229541A
; Publication No. US20040010821A1
; GENERAL INFORMATION:
; APPLICANT: McCourt, Peter
; APPLICANT: Ghassemlian, Majid
; APPLICANT: Cutler, Sean
; APPLICANT: Bonetta, Dario
; TITLE OF INVENTION: Stress Tolerance and Delayed Senescence in Plants
; FILE REFERENCE: 22542-007CIP2

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; CURRENT APPLICATION NUMBER: US/10/229,541A
; CURRENT FILING DATE: 2002-08-27
; PRIOR APPLICATION NUMBER: 10/160,764
; PRIOR FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: 60/294,766
; PRIOR FILING DATE: 2001-05-31
; PRIOR APPLICATION NUMBER: 60/348,909
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: 10/210,760
; PRIOR FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; PRIOR APPLICATION NUMBER: 09/191,687
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 176
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 116
; LENGTH: 1275
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
; US-10-229-541A-116

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Query Match 7.9%; Score 143.6; DB 6; Length 1275;
Best Local Similarity 48.6%; Pred. No. 9.5e-25;
Matches 468; Conservative 0; Mismatches 449; Indels 45; Gaps 1;
QY 700 CAGAGTTTATGCTTCTTGGGTCTCTTATCCAGTTTGTCTACTCTTGGTTGATTTGGCACTC 759
Db 319 CATACTCTTCTTCTTGGGTCTTATGATGATGATGATGATGATGATGATGATGATGATGAT 378
QY 760 TCTTACTATAGCCATTTGCTCTCGAAGAAATTTGGTTTCAATAAATTTGACCGTCCAA 819
Db 379 TCTTGTACTCAACTTCTGATCGAGTCTCGGATGGGTTCAACAACAACAATATGG 438
QY 820 CTATGGATCACCGATATGATCAAGAGTCTGACTTTGGCGTATGCTATTGGTGGCCCAATC 879
Db 439 ATGTTTATTAGGACATGATCAAGAAATTCCTCTCTGTCTACTAGGCCACCAT 498
QY 880 CTTTACCTGTTTCTTATAGATCTTTGATAAATTCCTACTGATTTCCCTTTGGTACATATG 939
Db 499 GTTGGCGGATATTTTTCATAGTCCAGAAAGAGGTCTCTTATCTTGGCATCTATCTGTGG 558
QY 940 GTCCTTCTGTTGCTGTTGCTTCCAAATCTTAGCCATGACAAATTCATTCAGTCTTTCATATGCC 999
Db 559 GCATTCATGTTTATCTCTGCTCTCTAGTATGATGATGATGATGATGATGATGATGATGATG 618
QY 1000 ATGTTTAAATAGTTTCACTCCATTTGGAGGACGGTGAACCTGAAATAATCTATTGAAAGTTTG 1059
Db 619 CTCCTTCAACAAGTTTCACTCTCTTCCAGATGAGACCTCCGGGAGAAATTTGAGAAATTT 678
QY 1060 GCCGATAGTGGTTCCTCTAGATGAATTTTGTGCTTATGATGATGATGATGATGATGATGATG 1119
Db 679 GCTTCTTCTTAAAGTTTCTTTCGAAAGAGCTGTTTGTGTCGATGATGATGATGATGATGATG 738
QY 1120 TCTCATTCAAACGATATTTTCCAGGTTTGCATTCACCTCCCAAGAAATTTGTTTGTTC 1179
Db 739 AGCCATAGCAATGCTTTTACATGATGATGATGATGATGATGATGATGATGATGATGATGAT 798
QY 1180 GACACTTTAGTGAACAGTAATTTCTACTGATGAATTTAGCGGCTGTTTGGCCCATGAATTC 1239
Db 799 ACGTTGATTCAGCAGTGAAGAAATTTGAGGAGTGAATTTGAGAAATTTGAGAAATTT 858
QY 1240 GGTCACTGGCAAAAACCAATCTGATGAATTTAGCTGTTTGGCCCATGAATTC 1299
Db 859 GGACATTTGGAACCTGAATCACAATCACTACTGTTTGGTTCGATGATGATGATGATGATGATG 918
QY 1300 CTCATTTTCTCCCTTTTCCAGAACTCATGAATATCAAGTGTATGCTTTATGCTTAAAAA 1359
Db 919 TTACAATTTGGAGGATACACTCTTGTGAGAACTCCACTGATCTCTTCAGGAGTTTCGGA 978
QY 1360 TTTTCTTTAGAGAGTCCACTGGCAGTTTGTGATCCGGTTATCACTAAGGAATTTCCCC 1419
Db 979 TTTGATACAG-----CCT 993
QY 1420 ATTATCATTTGATTTATGTTTAAACGACTTATTAACTCCACTCGAATGTGCCATGCAA 1479
Db 994 GTTCTCATTTGTTGATCATATTTTCAGCACACTGTAATACCACTGCAACATCCAGTAAGC 1053
QY 1480 TTGCTGATGAGTTTAAATTTCCAGAACTCATGAATATCAAGTGTATGCTTTATGCTTAAAAA 1539
Db 1054 TTTGGCCTCAACCTTTGTTAGTCGAGCGTTTGAGTTTTCAGGCTGATGCTTTTGTCTGTAAG 1113
QY 1540 TTGGGCTACAGCAAAAATCTATGAGGCTCTAATTTGATCTACAATCAAAAACCTTTCC 1599
Db 1114 CTTGGCTATGCAAAAAGATCTTCGCTCTACTCTAGTGAACCTACAGGAAGAGAACTTATCA 1173
QY 1600 ACCATGAATGATAGCTCTGATTTCTAGCTATCATTTATCCATCCCAACTCTAGCTGAA 1659
Db 1174 GCAATGAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1233
QY 1660 AG 1661
Db 1234 AG 1235

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979	TTTGATACAG-----CTT	993
1420	ATTATCATCGGATTTATGTTATTAAACGACTTATTAACTCCACTCGAATGTGCCATGCAA	1479
994	GTTCCTCATGGTTTGATCATATTTCCAGCACACTGTTATACCACTGCAACATCCAGTAAGC	1053
1480	TTGCTGATGAGTTTAAATTTCCAGAACTCATGAATATCAAGCTGATGCTTATGCTAAAAAA	1539
1054	TTTGGCCTCAACTGTGTTAGTCGAGCGTTTGAGTTTCAGGCTGATGCTTTGCTGTGAAG	1113
1540	TTGGGCTACAAGCAAAATCTATGTAGGGCTCTAAATTGATCTACAATCAAAAACCTTTCC	1599
1114	CTTGGCTATGCAAAAGATCTTCGCTCTACTCTAGTGAACATACAGGAAGAGAACTTATCA	1173
1600	ACCATGAATGTAGATCCTCTGTATTTCTAGCTATCATTTTCCATCCAACTCTAGCTGAA	1659
1174	GCATGAATGACTGATCCATTGTGTACTAGCTTATCACTACTACATCCTCCTCTTGTGAA	1233
1660	AG 1661	
1234	AG 1235	

RESULT 4

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US-10-210-760A-35/c
; Sequence 35, Application US/10210760A
; Publication No. US20030204865A1
; GENERAL INFORMATION:
; APPLICANT: Wan, Jiangxin
; APPLICANT: Huang, Yafan
; APPLICANT: Delina Campbell, Mary-Jane
; APPLICANT: Kuzma, Monika Maria
; APPLICANT: Gilley, Angela Patricia
; TITLE OF INVENTION: Caax prnyl protease nucleic acids and polypeptides and
; FILE REFERENCE: methods of use thereof
; CURRENT APPLICATION NUMBER: US/10/210,760A
; CURRENT FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 35
; LENGTH: 5544
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: pBil21-antisense-AtCpP vector sequence
US-10-210-760A-35

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	Query Match	7.8%;	Score 143;	DB 6;	Length 5544;
	Best Local Similarity	46.2%;	Prod. No. 3.1e-24;		
	Matches 610;	Conservative	0;	Mismatches 655;	Indels 54; Gaps 2;
Qy	343	ATGTTTGATCTTAAGAGCATTTCTCGACCATCCTAATATCCCGTGGAAATAATCATTTTCT	402		
Db	438	ATGTTTGAAGATCGGGGAATTTGAGGGGATGCGGATTCCTTTCATGGAAACCGTCGTG	4579		
Qy	403	GGGTTCGTGATGGCCAAATTTCTTTCGAAATCTTTATCTTGACGTACAGACAGTACCGAAG	462		
Db	4578	GGTTTATGATAGTGTATGTACATATTTTGAGACAGTATTTGGATCTGAGGCCAACTCACTGCT	4519		
Qy	463	CTATCTGAACAACAAAGTTCGCCACCTGCTGCTGGAAGACGAAATTTGATGATGAACATTTTCAT	522		
Db	4518	CTCAAGCTTCCAACTCTCCCGAAACCTTGGTTGGTGTAAATTAGCCAAAGACAGTTTGAG	4459		
Qy	523	AAATCAAGGAACATACTCCCGGGCCAAAGCCAAAGTTCTCCATTTTCGGTACGCTATATAAC	582		
Db	4458	AAATCAAGGACATACAGTCTTTGACAAAGACTATTTTCACTTTGTTTCATGAGTTTGTAAC	4399		

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RESULT 5
US-10-229-541A-130/c
; Sequence 130, Application US/10229541A
; Publication No. US20040010821A1
; GENERAL INFORMATION:
; APPLICANT: McCourt, Peter
; APPLICANT: Ghassemian, Majid
; APPLICANT: Cutler, Sean
; APPLICANT: Bonetta, Dario
; TITLE OF INVENTION: Stress Tolerance and Delayed Senescence in Plants
; FILE REFERENCE: 22542-007CIP2
; CURRENT APPLICATION NUMBER: US/10/229,541A
; CURRENT FILING DATE: 2002-08-27
; PRIOR APPLICATION NUMBER: 10/160,764
; PRIOR FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: 60/294,766
; PRIOR FILING DATE: 2001-05-31
; PRIOR APPLICATION NUMBER: 60/348,909
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: 10/210,760
; PRIOR FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; PRIOR APPLICATION NUMBER: 09/191,687
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 176
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 130
; LENGTH: 5544
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Plasmid
; OTHER INFORMATION: pBI121-antisense-AtCYP
US-10-229-541A-130

Query Match      7.8%; Score 143; DB 6; Length 5544;
Best Local Similarity 46.2%; Pred. No. 3.1e-24;
Matches 610; Conservative 0; Mismatches 655; Indels 54; Gaps 2;

Qy 343 ATGTTGATCTTAAGACAAATCTCGACCATCTTAATATCCCGTGGAAATTAATCATTTCT 402
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 4638 ATGTTGAACGATCGGGGAAATTCGAGGGGATGCGGATTCCTTTTCATGGAAACCGTCGTG 4579
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 403 GGGTTCTCGATTGCCCAATTTCTTCGAATCTTACTTGACGTACAGACAGTACAGAAAG 462
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 4578 GGTTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 4519
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 463 CTATCTGAACAAAGTTGCCACCTGTGCTGGAAGCAGAAATGATGATGATGATGATGATGATGAT 522
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 4518 CTCAGCTTCCAACCTCTCCGAAACCTTGGTGGTGAATAGCCAGAGAAAGTTTGGAG 4459
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 523 AAATCAAGAACTACTCCCGGCGCCAGCCAGTTCTCCATTTTCGGTGGAGCTCTATAAC 582
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 4458 AAATCACGAGCATACAGTCTTGACAAAAGCTATTTCATCTTTGTTTCATGATGTTTGAAT 4399
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 583 CTAGCCCAAAAGTAGTTTTCATCAATACGACCTCTTCCCTAAATCTGGCAATGGCC 642
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 4398 ATACTATGAGACTGCGCAATTTGTTCTTTGGGATCTTGCTTTGGTTTGGAAAGTGTCT 4339
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 643 GTTTCTTTTAAATGACAGTCTCGCCAGTCAAGATTTTCATATGGTCTCCACCTGTGCGCAAG 702
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 4338 GGAGCTGTTT-----TACCGAGGTTGGGCTTGATCCGGAGAAATGAATACTGCAT 4288
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 703 AGTTATGCTTCTGGGCTCTCTTATCCAGTTTGTCTACCTTGGTTGATTTGCCACTCTCT 762
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 4287 ACTCTTTTCATTTCTGGCTGGTGTATGACATGGTTCACAGATCACTGATTTGCCATTTTCT 4228
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Qy 763 TACTATAGCCATTTTGTCTCGAAGAAAATTTGGTTTCAATAAATGACCGTCCAACTA 822
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

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Db 4227 TTGTACTCAACTTTTCGTGATCGAGTCTCGGCATCGGTTCAACAAACAAATATGGATG 4168
Qy 823 TGGATCACCGATATGATCAAGAGTCTGACATTTTCGGGTATGCTATTGGTGGCCCAATCCTT 882
Db 4167 TTCAATAGGACATGATCAAGAGCAATTCCTCTCTGTCTATAGTACGAGCCCACTATGTT 4108
Qy 883 TACCTGTTCTTAAAGATCTTTGATAAATTCCTACTACTGATTTCCCTTTGGTACATATGCTC 942
Db 4107 GCTGCGATAAATTTTCATAGTCCAGAAAGGAGGTCCTTATCTTGCATCTATCTGTGGGCA 4048
Qy 943 TTCTGTTCGTTGTCGCAATTCCTTAGCCATGACAAATCAATCCAGTCTTCATCATGCCCCATG 1002
Db 4047 TTCAATAGGACATGATCAAGAGCAATTCCTCTCTGTCTATAGTACGAGCCCACTATGTT 3988
Qy 1003 TTTAATAAGTTCACCTCCATTTGGAGGAGGTAAGTGAATAAATCTATTGAAAGTTTCGCC 1062
Db 3987 TTCAACAAATTCACCTCTCTTCCAGATGGAGACCTCCGGAGAGATTTGAAACTTTGCT 3928
Qy 1063 GATAGAGTTGGGTTCCCTCTAGATAAGATTTTGTCAATGACGGCTCAAAAAGATCTTCT 1122
Db 3927 TCTTCCCTAAAGTTTCCTTTGAAGAAGCTGTTTGTGTCGATGATCTACAAGGTCAAGC 3868
Qy 1123 CATTCAAACGATATTTTCACAGGTTTCCCAATTCACCTCCAGAGAAATTTGTTTTCGAC 1182
Db 3867 CATAGCAATGCTTACATGATGTTTCTTTAAGAACAAAGGATTTGTTTATGATACG 3808
Qy 1183 ACTTTAGTGAACAGTAAATCTACTGATGAATTAAGGCTGTTTGGGCCATGAAATCGGT 1242
Db 3807 TTGAATTCAGCAGTGAAGAATGAGGATGAAATTTGTGCGGTTTATGACACAGGCTTGA 3748
Qy 1243 CACTGGCAAAAAACCAATCTGTTAATATGATGATGATGATGATGATGATGATGATGATGATGAT 1302
Db 3747 CATTTGAACTGAATCACATCTACATCTGTTTCATTCGAGTTCAAATCTTGCCTTCTTA 3688
Qy 1303 ATTTTCTCCCTTTTCACAGCACTCTACAGAAATACATCATTTTACACACCTTCGGCTTT 1362
Db 3687 CAATTTGGAGGATACACTCTTCTCAGAAACTCCACTGATCTCTTCAGGAGTTTCGGATT 3628
Qy 1363 TTCTTAGAAGAGTCCACTGGCAGTTTGTGATCCCGTTTATCACTAAGGAATTCCTCCATT 1422
Db 3627 GATACAG-----CTGTT 3613
Qy 1423 ATCATTTGATTTATTTTAAAGCACTTATTAATCCACTCGAATGTCATCAATTC 1482
Db 3612 CTCAATGTTTGTATCATTTTCAGCACACTGTAATACCACTGCAACATCTAGTAAGCTTT 3553
Qy 1483 GTGATGATTTAAATTTCCAGAACTCATGAATATCAAGCTGATGCTTATGCTAAAAAATTG 1542
Db 3552 GGCCTGAACCTCGTTAGTCGAGCGTTTGTAGTTTTCAGGCTGATGCTTTTGTGTGAAGCTT 3493
Qy 1543 GGCCTGAAGCAAAATCTATGAGGCTCTAATGATCTCAAAATCAAAAACCTTTCCACC 1602
Db 3492 GACTATGCAAAAGATCTTCGTCCTAGTGAATCTAGGAGAGAACTTATCAACA 3433
Qy 1603 ATGAATGTAGATCTCTGTATTTCTAGCTATTCATTTTCCCATCCAACTCTAGCTGAAG 1661
Db 3432 ATGAACTGATCAATTTGATCTAGCTTATCACTACTCACTCTCTCTCTTGTGAAAG 3374

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RESULT 6
US-10-210-760A-38/c
; Sequence 38, Application US/10210760A
; Publication No. US20030204865A1
; GENERAL INFORMATION:
; APPLICANT: Wan, Jiangxin
; APPLICANT: Huang, Yafan
; APPLICANT: Delina Campbell, Mary-Jane
; APPLICANT: Kuzma, Monika Maria
; APPLICANT: Gilley, Angela Patricia
; TITLE OF INVENTION: Caax prenyl protease nucleic acids and polypeptides and
; FILE REFERENCE: 22542-009
; CURRENT APPLICATION NUMBER: US/10/210,760A

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Db 298 GATCCGGAGATGAATATACATGATATCTTTTATTTCTTGGCTGGTATTATGACATGGTCA 357
Qy 739 ACCTTGGTGGATTTGGCCATCTCTTACTATAGCCATTTTGTCTCTGGAAGAAAATTTGGT 798
Db 358 CAGATCACTGATTTGGCCATTTTCTTGTACTCAACTTTCGTGATCGAGTCTCGGCATGGG 417
Qy 799 TTCAATTAATTTGACCGTCCCAATATGATGATCACCAGATATGATCAAGAGTCTGACTTTGGCG 858
Db 418 TTCAACAAACAAACAAATATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 477
Qy 859 TATGCTATTGGTGGCCCAATCTTTTACCTGCTTCTTAAAGATCTTTTATATAATTTCCCTACT 918
Db 478 GTCATACTAGGCCCACTTGTGTCGATATTTTATAGTCTAGAGAGAGTCTCT 537
Qy 919 GATTTCTTTGGTACATTTATGCTTTCTTGTCTTGTCTTGTCTTGTCTTGTCTTGTCTTGTCT 978
Db 538 TATCTTGGCATCTATCTGTGGGCAATTCATGTTTATCTGCTCTAGTATGATGATGATGATGAT 597
Qy 979 ATTCCAGTCTTCATCATGCCCCATGTTTATTAAGTTCCTTCACTCCATTTGAGGAGCGTGAAC 1038
Db 598 TACCCGGTCTTGTATAGACCGCTCTTCAACAAATTCACCTCTTCCAGATGGAGACCTC 657
Qy 1039 AAAAAATCTATTGAAGTTTGGCCGATAGAGTTGGTTCCTCTAGATGAAGATTTTGTG 1098
Db 658 CGGAGAGAGATTTGAAACTTGTCTTCCCTAAAGTTTCTTGAAGAGCTGTTTGT 717
Qy 1099 ATTGACGGCTCAAAAAGATCTTCTCATTTCAACGCGATATTTACAGGTTTGGCATTCACC 1158
Db 718 GTCGATGGATCTACAAGTCAAGCCATAGCAATGCTTACATGATGATGATGATGATGATGATGAT 777
Qy 1159 TCCAAGAGATTTGTTGTCGACACTTTAGTGAACAGTAAATTTCTACTGATGAATATGAC 1218
Db 778 AAAAGGATTTGTTCTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 837
Qy 1219 GCTGTTTGGCCATGAATTCGGTCACTGGCAAAAAACACATCGTTAATATGTTGTCATC 1278
Db 838 CGGTTATTCACACGAGCTTGACATTTGAAACTGAACTGATACATACATACATACATACATACAT 897
Qy 1279 TTTAGTCAATTTGACACCTTCTCTCATTTTCTCCCTTTTCCAGCATCTACAGAAATACA 1338
Db 898 CGAGTTCAAAATCTTGGCTTCTTACAATTTGGAGGATACACTCTTCTCAGAAACTCCACT 957
Qy 1339 TCATTTTACACACCTTGGCTTTTCTTAGAGAGTCCACTGGCAGTTTGTGATCCC 1398
Db 958 GATCTCTTCAGGAGTTTGGATTTGATACAG----- 990
Qy 1399 GTTATCACTAAGGAATTTCCCAATTTATCATTTGGATTTATGTTTAAACGACTTATTAAC 1458
Db 991 -----CCTGTTCTCATTTGTTGATCATATTTAGACACTGTAATA 1032
Qy 1459 CCATCGAATGTGCGATGCAATTTGCGATGAGTTTAAATTTCCAGAACTCATGAAATATCAA 1518
Db 1033 CCATCGAATCATGATGAAAGCTTTGGCTGAACTTCCGTTAGTCCGAGGTTTGAATTTGAG 1092
Qy 1519 GCTGATGCTTATGCTAAATAATTTGGGCTACAGCAAAATCTATGTTAGGCTCTTAATGAT 1578
Db 1093 GCTGATGCTTATGCTGAAAGCTTGAATGATGCAAAAGATCTTCTGCTGCTGCTAGTAA 1152
Qy 1579 CTCAAAATCAAAACCTTTTCCACCATGAATGATGATGATGATGATGATGATGATGATGATGAT 1638
Db 1153 CTACAGAGAGAGACTTATCAACATGAACTGATGATGATGATGATGATGATGATGATGATGAT 1212
Qy 1639 TCCATCCAACTCTAGCTGAAAG 1661
Db 1213 TCACATCTCTCTTGTGTAAG 1235
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RESULT 9

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US-10-210-760A-20/c
; Sequence 20, Application US/10210760A
; Publication No. US20030204865A1
; GENERAL INFORMATION:
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; APPLICANT: Wan, Jiangxin
; APPLICANT: Huang, Yafan
; APPLICANT: Delina Campbell, Mary-Jane
; APPLICANT: Kuzma, Monika Maria
; APPLICANT: Gilley, Angela Patricia
; TITLE OF INVENTION: Cxax prenyl protease nucleic acids and polypeptides and
; TITLE OF INVENTION: methods of use thereof
; FILE REFERENCE: 22542-009
; CURRENT APPLICATION NUMBER: US/10/210,760A
; CURRENT FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 20
; LENGTH: 1275
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: sequence
; OTHER INFORMATION: complimentary to seq id no: 1
US-10-210-760A-20
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Query Match 7.6%; Score 139; DB 6; Length 1275;
Best Local Similarity 46.3%; Pred. No. 1.3e-23;
Matches 594; Conservative 0; Mismatches 635; Indels 54; Gaps 2;
Qy 379 ATCCCGTGGAAATTAATCATTTCTGGGTTCTCGATTGGCCCAATTTTCTTTCGAATCTTAC 438
Db 1269 ATTCTTTTCATGGAAACCGTCTGGGTTTATAGTAGTATGATGATGATGATGATGATGATGAT 1210
Qy 439 TTGACGTACAGACAGTACAGAGCTATCTGAAACAAAGTTCGACCTGCTGCTGGAAGAC 498
Db 1209 TTGGATCTCGAGCAACTCACTGCTCTCAAGCTTCCAACTCTCCGAAAAACCTTGGTTGGT 1150
Qy 499 GAAATTTGATGATGAACACTTTTCATAAATCAAGAACTACTCCCGGCCCAAGGCCAAGTTTC 558
Db 1149 GTAATTTAGCAAGAGAGTTTGGAGAAATCAGAGCATACAGTCTTGACAAAAGCTATTTT 1090
Qy 559 TCATTTTTCGGTGCAGCTCTATAACCTAGCCCAAAAGCTAGTTTTCATCAAAATACGACCTC 618
Db 1089 CACTTGTTCATGAGTTTGTGTAACATATATGAGCTCTGCAATTTTGTCTTTGGGATC 1030
Qy 619 TTCCCTAAAATCTGGCAGATGGCCGTTTCTTTTATGAATGAGTCTCTGCCAGTCAGATTT 678
Db 1029 TTGCCTTGGTTTGGAGATGTCGAGCTGTTT-----TACCGAGTTGGGCCCTT 979
Qy 679 CATATGCTCTCCACTGTTCGACAGAGTTTATGCTTCTTGGGCTCTCTTATCCAGTTTGTCT 738
Db 978 GATCCGGAGAAATGAATACTATGATATCTTTTCAATCTTGGCTGGTGTATGATGATGATGAT 919
Qy 739 ACCTTGGTTGATTTGGCACTCTCTTACTATAGCAATTTTGTCTGGAAGAAAATTTGGT 798
Db 918 CAGATCACTGATTTGGCAATTTTCTTGTGTAACACTTTTCTGATCGAGTCTCGGCATGGG 859
Qy 799 TTCAATTAATTTGACCGTCCCACTATGGAATCAGGATATGATCAAGAGTCTGACTTTGGCG 858
Db 858 TTCAACAAACAAACAAATATGAGTGTTCATTTAGGACATGATCAAAAGGAACATTTCTCTCT 799
Qy 859 TATGCTATTGGTGGCCCAATCTTTTACCTGTTCTTAAAGATCTTTTATATAATTTCCCTACT 918
Db 798 GTCATACTAGGCCCACTTGTGTCGATATTTTATAGTCTAGAGAGAGTCTCT 739
Qy 919 GATTTCTTTGGTACATTTATGCTTTCTTGTCTTGTCTTGTCTTGTCTTGTCTTGTCTTGTCT 978
Db 738 TATCTTGGCATCTATCTGTGGGCAATTCATGTTTATCTGCTCTAGTATGATGATGATGAT 679
Qy 979 ATTCCAGTCTTTCATCATGCCCCATGTTTATTAAGTTCCTTCACTCCATTTGAGGAGCGTGAAC 1038
Db 678 TACCCGGTCTTGTATAGCACCGCTCTTCAACAAATTCACCTCTCTTCCAGATGGAGACCTC 619
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Db 898 GCAGTTCAAATCCTTGCCTCTTACAAATTTGGAGGATACACTCTTCTCAGAAATCCACT 957
Qy 1339 TCATTTTACAAACCTTTCGCTTTTCTTTAGAGAAGTCCACTGGCAGTTTGTGTGATCCC 1398
Db 958 GATCTCTTCAGGAGTTTCGGATTTGATACACAG----- 990
Qy 1399 GTTATCACAAGGAATTCCTCCATTATCATTTGGATTTATGTTTAAACGACTTATTAACT 1458
Db 991 -----CCTGTTCTCATTTGTTGATCATATTTCCAGCACACTGTAATA 1032
Qy 1459 CCACTCGAATGTGCCATGCAATTCGATGAGTTTAAATTTCCAGAACTCATGAATATCAA 1518
Db 1033 CCACTGCAACATCTAGTAAGCTTTGGCTTGAACCTCGTTAGTCGAGCGTTTGAAGTTTCAG 1092
Qy 1519 GCTGATGCTTATGCTAAAAAATTTGGGCTACAAGCAAAATCTATGTAGGCTCTAATTGAT 1578
Db 1093 GCTGATGCTTTTGTCTGTAAGCTTGACTATGCAAAAGATCTTGTCTCTCTAGTGA 1152
Qy 1579 CTACAAATCAAAAACCTTTCCACCATGAATGTAGATCTCTGTGATTTCTAGCTATCAT 1638
Db 1153 CTACAGAGAGAACTTATCAACAATGAACACTGATCCATTGACTCAGCTTATCACTAC 1212
Qy 1639 TCCATCCCACTCTAGCTGAAAG 1661
Db 1213 TCACATCTCTCTGTTGAAAG 1235

RESULT 11

US-10-229-541A-115/c
; Sequence 115, Application US/10229541A
; Publication No. US20040010821A1
; GENERAL INFORMATION:
; APPLICANT: McCourt, Peter
; APPLICANT: Ghassemlan, Majid
; APPLICANT: Cutler, Sean
; APPLICANT: Bonetta, Dario
; TITLE OF INVENTION: Stress Tolerance and Delayed Senescence in Plants
; FILE REFERENCE: 22542-007CIP2
; CURRENT APPLICATION NUMBER: US/10/229,541A
; CURRENT FILING DATE: 2002-08-27
; PRIOR APPLICATION NUMBER: 10/160,764
; PRIOR FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: 60/294,766
; PRIOR FILING DATE: 2001-05-31
; PRIOR APPLICATION NUMBER: 60/348,909
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: 10/210,760
; PRIOR FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; PRIOR APPLICATION NUMBER: 09/191,687
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 176
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 115
; LENGTH: 1275
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Compliment to
; OTHER INFORMATION: SEQ ID NO: 97
US-10-229-541A-115

Query Match 7.6%; Score 139; DB 6; Length 1275;
Best Local Similarity 46.3%; Pred. No. 1.3e-23;
Matches 594; Conservative 0; Mismatches 635; Indels 54; Gaps 2;
Qy 379 ATCCCGTGGAAATTAATCATTTCTGGGTTCTCGAATGCCCAGATTTCTTTTGAATCTTAC 438
Db 1269 ATTCCTTTCTGGAACCGTCGTGGGTTTATGATAGTGATACATTTTGTGACGTAT 1210

Qy 439 TTGCGTACAGACGTACCAGAAGCTATCTGAAACAAAGTTGCCACCTGTGCTGGAAGAC 498
Db 1209 TTGGATCTGAGGCAACTCAGTCTCTCAAGCTTCCAACTCTCCGAAAAACCTTGGTGGT 1150
Qy 499 GAAATTTGATGATAAATTTTTCATAAATCAAGGAATCTATCCCGGGCCAAAGCCCAAGTTC 558
Db 1149 GTAATTTAGCCAAAGAGAGTTTGGAGAAATCAGAGCATACAGTCTTGACAAAAGCTATT 1090
Qy 559 TCCATTTTCGGTGGAGCTCTATAAACCCTAGCCCCAAAAGCTAGTTTTCATAAATACACCTC 618
Db 1089 CACTTTGTTTCATAGTTTGTAACTATATCTTATGGAATCGAGTCTCTGCCAGTCAGATT 1030
Qy 619 TTCCCTAAAAATCTGCACATAGCCCGTTTCTTATTGAATCGAGTCTCTGCCAGTCAGATT 678
Db 1029 TTGCCCTTGGTTTGGAAAGATGCTGGAGCTGTTT-----TACCAGGTTGGGCCTT 979
Qy 679 CATATGGTCTCCACTGTCCGACAGAGTTTATGCTTCTTTGGGTCTCTTATCCAGTTTGTCT 738
Db 978 GATCCGGAGAAATGAATAATCTGCATATCTCTTCATCTTTGGCTGGTGTATGACATGGTCA 919
Qy 739 ACCTTGGTTGATTTGCCACTCTCTTACTATAGCCATTTTGTCTCTGGAAGAAAATTTGGT 798
Db 918 CAGATCACTGATTTGCCATTTTCTTTGTACTCAACTTTTCGTGATCGAGTCTCGGCATGGG 859
Qy 799 TTCAATAAATTGACCGTCCAACTATGGATCACCGATATGATCAAGAGTCTGACTTTGGCG 858
Db 858 TTCAACAAACAAACAATATGGATGTTTCATTAGGACATGATCAAGGAACATTCCTCTCT 799
Qy 859 TATGCTATTGGTGGCCCAATCCCTTACCTGTTTCTTTAAGATCTTTTGATAAAATTCCTACT 918
Db 798 GTCATACTAGGCCCAACCCATGTTGCTGCGATAATTTTTCATAGTCCAGAAAGAGGCTCT 739
Qy 919 GATTTCTTTGGTACATATATGCTCTCTTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 978
Db 738 TATCTTGGCATCTATCTGTGGCATTCATGTTTATCTCTCTCTCTAGTATGATGACTATA 679
Qy 979 ATTCAGTCTTCATCATGCCCATGTTTAAATAGTTTCACTTCCATTTGGAGACGCTGAACTG 1038
Db 678 TACCGGCTCTTGATAGCACCGCTCTTCAACAATTTCACTCTCTTCCAGATGGAGACCTC 619
Qy 1039 AAAAAATCTATTGAAAGTTTGGCCGATAGAGTTGGGTTCCCTCTAGATAAAGATTTTGTCT 1098
Db 618 CGGGAGAGATTTGAGAAACTTCTCTTCTCCCTTAAAGTTTCTTTGAAAGAGCTGTTGTT 559
Qy 1099 ATTGAGGCTCAAAAAGATCTTCTCATTCAAAGCATATTTCCAGAGTTTGGCATTCACC 1158
Db 558 GTCGATGGATCTACAAGGTCAAGCCATAGCAATGCTTACATGATGTTGTTTCTTTAAGA 499
Qy 1159 TCCAAGAGAAATTTGTTTGTGACACTTTAGTGAACAGTAAATTTCTACTGATAAAATACG 1218
Db 498 AAAAGATTGTTCTTTATGATAGCTTGTGATTGAGCTGCAAGAAATGAGGATGAAATTTG 439
Qy 1219 GCTGTTTGGCCCATGAAATTCGGTCACTGGCAAAAAAACCAATCGTTAATATGGTCATC 1278
Db 438 GCGGTTATTGACACAGAGCTTGGACATTTGAAACTGAATCACACTACACTACTCGTTCA 379
Qy 1279 TTTAGTCAATTTGCACACCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1338
Db 378 GCAGTTCAAAATCTTGCCTTCTTACAATTTGGAGGATACACTCTTCTCAGAACTCCACT 319
Qy 1339 TCATTTTCAACACACCTTTCGGCTTTTCTTTPAGAGAAGTCCACTGGCAGTTTGTGTATCCC 1398
Db 318 GATCTCTTCAGGAGTTTCGGATTGATACACAG----- 286
Qy 1399 GTTATCACAAGGAATTCCTCCATTTATCATTTGATGATTTATTTAAACGACTTATTA 1458
Db 285 -----CCTGTTCTCTATTTGGTTTTCATCATATTTTCCAGCACACTGTAATA 244
Qy 1459 CCNCTCGAATGTGCCATGCAATTCGATGAGTTTAAATTTCCAGAACTCATTAATATCAA 1518
Db 243 CCACTGCAACATCTAGTAAGCTTTGGCCCTGAACTCGTTAGTCGACGCTTTGAGTTTCAG 184
Qy 1519 GCTGATGCTTATGCTAAAAAATTTGGGCTACAAGCAAAATCTATGTAGGCTCTTAAT 1578


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, CURRENT APPLICATION NUMBER: US/10/229,541A
, CURRENT FILING DATE: 2002-08-27
, PRIOR APPLICATION NUMBER: 10/160,764
, PRIOR FILING DATE: 2002-05-31
, PRIOR APPLICATION NUMBER: 60/294,766
, PRIOR FILING DATE: 2001-05-31
, PRIOR APPLICATION NUMBER: 60/348,909
, PRIOR FILING DATE: 2001-10-22
, PRIOR APPLICATION NUMBER: 10/210,760
, PRIOR FILING DATE: 2002-08-01
, PRIOR APPLICATION NUMBER: 60/309,396
, PRIOR FILING DATE: 2001-08-01
, PRIOR APPLICATION NUMBER: 60/337,084
, PRIOR FILING DATE: 2001-12-04
, PRIOR APPLICATION NUMBER: 09/191,687
, PRIOR FILING DATE: 1998-11-13
, NUMBER OF SEQ ID NOS: 176
, SOFTWARE: PatentIn Ver. 2.1
, SEQ ID NO 134
, LENGTH: 5074
, TYPE: DNA
, ORGANISM: Artificial Sequence
, FEATURE:
, OTHER INFORMATION: Description of Artificial Sequence: Plasmid
, OTHER INFORMATION: MuA-AtCpP
US-10-229-541A-134

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Query Match	7.6%	Score 139	DB 6	Length 5074	
Best Local Similarity	46.3%	Pred. No. 2.9e-23			
Matches	594	Conservative 0	Mismatches 635	Indels 54	Gaps 2
QY	379	ATCCCGTGGAAATTAATCATTTCTCGGGTCTCGAGTTGCCCAATTTTCTTTTCGAACTCTTAC	438		
Db	2870	ATTCTCTTTCATGGAAACCGTCGTGGGTTTATGATAGTGAATGTACATTTTGTGAGACGTAT	2929		
QY	439	TTGACGTACAGACAGTACCAGAAGCTATCTGAACAAAGTTGGCCACCTGTGCTGGGAAGAC	498		
Db	2930	TTGGATCTGAGGCAACTCACTGCTCTCAAGCTTCCAACTCTCCCGAAAACTTTGGTTGGT	2989		
QY	499	GAATATGATGATGAAACTTTTTCATAAATCAAGGAACCTACTCCCGGGCCAGGCCAGTTC	558		
Db	2990	GTAATTAGCCAAAGAGAAGTTTGGAGAAATCACAGACATACAGCTCTTGACAAAAGCTATTTT	3049		
QY	559	TCCATTTTCGGTGACGTCTATAACCTAGCCCAAAAGCTAGTTTTCATCAAAATACGACCTC	618		
Db	3050	CACTTTGTTCATGAGTTTGTGTAACCTATTAATGAGCTCTGCAATTTTGTCTTTTGGGATC	3109		
QY	619	TTCCCTAAAATCTGGCCATGCGCGTTTCTTTTATGAATGCAGTCCCTGCCAGTCAGATTT	678		
Db	3110	TTGCTTGGTTTGGAAAGATGCTCGGAGCTGTTT-----TACCAGAGTTGGGCGCTT	3160		
QY	679	CATATGGTCTCCACTGTGCGCACAGAGTTTATGCTTCTTTGGGTCTCTTATCCAGTTTGTCT	738		
Db	3161	GATCCGGAGAAATGAAATACTGCATACTCTTTTCACTTCTTGGCTGTTATGACATGTCAC	3220		
QY	739	ACCTTGGTTGATTTGGCCACTCTCTTACTATAGCCATTTTGTCTCCGGGAAGAAAAATTTGGT	798		
Db	3221	CAGATCACTGATTTGCCATTTTCTTTGTACTCAACTTTTCGTGATCGAGTCTCGGCATGGG	3280		
QY	799	TTCAATAAATTTGACCGTCCAACTATGGATCAACCGATATGATCAAGAGCTGACTTTTGGCG	858		
Db	3281	TTCAACAAACAAACAATATGATGTTTCATTAGGGACATGATCAAGGAACAATCTCTCTCT	3340		
QY	859	TATGCTATTGTGTGGCCCAATCCTTTAACCCTTCTTAAAGATCTTTGATATAAATCCCTACT	918		
Db	3341	GTCACTACTAGGCCCAACCAATTTTGTCTGCGATAAATTTTTCATAGTCCAGAAAGAGGTCCCT	3400		
QY	919	GATTTCCCTTGTGTCATTAATGCTCTCTTGTGTTGTCGTTGTCCAAATCTTTAGCCATCACAATC	978		
Db	3401	TATCTTGGCATCTATCTGTGGGCATTCATGTTTATTCCTGCTCTCTAGTGATGATGACTATA	3460		
QY	979	ATTCAGTCTTTCATCATGCCCATGTTTAAATAGTTTCACTCACTTGGAGGACGGTGAACCTG	1038		


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QY 499 GAAATTTGATGTAAGAACTTTTCATAAATCAAGGAAGTACTCCGGGCCAAGCCAGTTC 558
Db 3460 GTAAATTAGCCACAGAGAAGTTTGAGAAATCACGAGCATACAGTCTTGACAAAAGCTATTTT 3519
QY 559 TCCATTTTCGGTGACGCTATACACCTAGCCAAAAGCTAGTTTTCATCAAAATACGACCTC 618
Db 3520 CACTTTGTTTCATGAGTTTGAACATATATATGGAATCTGCAATTTTGTCTTTGGGATC 3579
QY 619 TTCCCTAAATCTGGCACATGGCCGTTTCTTTATTTGAATGCGATCCTGCCAGTCAGATTT 678
Db 3580 TTGCCCTTGGTTTGGGAAGATGTCCTGGAGCTGTTT-----TACCGAGGTGGGCCCTT 3630
QY 679 CATATGGTCTCCACTCTCGCACAGAGTTTATGCTTCTTGGGTCTCTTATATCCAGTTTGTCT 738
Db 3631 GATCCGGAGAATGAATATCTGCATCTCTTTCATCTTGGCTGGTGTATGACATGGTCA 3690
QY 739 ACCTTGGTTGATTTGGCACTCTCTTACTATAGGCAATTTTGTCTCGGAAGAAAATTTGGT 798
Db 3691 CAGATCACTGATTTGGCAATTTCTTTGTACTCAACTTTCTGTATCGAGTCTCGGCATGGG 3750
QY 799 TTCAATAAATTTGACCGTCCAACTATGGATCACCGATATGATCAAGAGTCTGACTTTGGCG 858
Db 3751 TTCAACAACAACAATATGGATGTTCAATTAGGACATGATCAAGGAACATTCCTCTCT 3810
QY 859 TATGCTATTGGTGGCCCAATCCTTTTACCTGTTCTTAAAGATCTTTGATAAATCCCTACT 918
Db 3811 GTCATACATAGGCCCCACCCATTTGTGTCGCAATAATTTTCATAGTCCAGAAAAGGAGTCTCT 3870
QY 919 GATTTCCCTTTGGTACATATAGGTCTTCTGTTGTCGTTGCCAAATCTTAGCCATGACAAATC 978
Db 3871 TATCTTGGCACTATCTGTGGGCAATCAUGTTTATCTGTCTAGTGATGACTATA 3930
QY 979 ATTCCAGTCTTCATATGCCCATGTTTAAATAGTTTCACTCCATTTGAGGAGCGGTGAAGTG 1038
Db 3931 TACCCGGTCTTTAGTACACCGCTCTTCAACAAATTCACCTCTCTCCAGATGGAGACCTC 3990
QY 1039 AAAAAATCTATTGAAAGTTGGCGGATAGAGTTGGGTCCCTCTAGATAGATTTTGTGTC 1098
Db 3991 CGGAGAAGATTTGAGAACTTGCTCTTCCCTAAAGTTTCCCTTTGAAGAAGCTGTTTGT 4050
QY 1099 ATTGACGGCTCAAAAAGATCTTCTCATTTCAACGCAATATTTACAGGTTTGGCCATTCACC 1158
Db 4051 GTCGATGGATCTCAAGGTCAAGGCATAGCAATGCTTACATGTATGTTTCTTTAAGAAC 4110
QY 1159 TCCAAGAGAATGTTTGTTCGACACTTTAGTGAACAGTAATTTCTACTGATGAAATTACG 1218
Db 4111 AAAAGGATTTGTTCTTTATGATACGTTGATTCAGCAGTGCAGAAATGAGGATGAAATTTGTG 4170
QY 1219 GCTGTTTGGCCCATGAAATCGGTCACTGGCAAAAACCAACCATCGTTAATATGGTCATC 1278
Db 4171 GCGGTTATTCACACGAGCTTGGACATTTGAAAATGAAATCACACTACATACCTCGTTCAAT 4230
QY 1279 TTTAGTCAATTGACACCTTCTCTCATTTTCTCCCTTTTCCACAGCATCTACAGAAATACA 1338
Db 4231 GCAGTTCAATCTTGGCTTCTTACAATTTGGAGGATACACTCTTCTCAGAAAACCTCCACT 4290
QY 1339 TCATTTTACAAACCTTTGGCTTTTCTTTAGAGAAGTCCACTGGCAGTTTTTGTGTATCCC 1398
Db 4291 GATCTCTTCAGGAGTTTCGGATTTGATACACAG----- 4323
QY 1399 GTTATCACTAAGGAATTTCCCAATTTATCATTTGATTTATTTTAAAGACTTATTAAC 1458
Db 4324 -----CCTGTTCTCATTTGGTTTGATCATATTTACGACACTGTAAATA 4365
QY 1459 CCACCTGGAATGTGCCAATTCGTATGAGTTTAAATTTCCAGAACTCATGAATATCAA 1518
Db 4366 CCACTGCAACATCTAGTAAGCTTTGGCCTGNACCTCGTTAGTCGAGCGTTTGTAGTTTCAG 4425
QY 1519 GCTGATGCTTATGTAATAAAATTTGGGCTTACAGCAAAATCTATGTAGGGCTCTTAATTTGAT 1578
Db 4426 GCTGATGCTTTTGTGTGAAGCTTGACTATGCAAAAAGATCTTCGTCCTGCTCTAGTGAAA 4485
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QY 1579 CTACAAATCAAAAACCTTTTCCACCATGAATGTAGATCCTCTGTATTTCTAGCTATCATTTAT 1638
Db 4486 CTACAGGAAGAGAACTTATCAACATGAAACATGATCCATTTGTTACTCAGCTTATCACTAC 4545
QY 1639 TCCCATCCAACTCTAGCTGAAAAG 1661
Db 4546 TCACATCCTCCTCTTGTGTTGAAAAG 4568
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Search completed: December 9, 2005, 02:54:50
Job time : 1463.76 secs


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; CURRENT FILING DATE: 2003-12-31
; PRIOR APPLICATION NUMBER: US 60/437,482
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 37284
; LENGTH: 2306
; TYPE: DNA
; ORGANISM: Bovine 19866880574576
US-10-750-185-37284

Query Match          2.6%; Score 47.6; DB 6; Length 2306;
Best Local Similarity 72.1%; Pred. No. 0.041;
Matches 62; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

QY 27 ACGAAGCCCTTACACACACACACATACATCTTACATACATACATACATACATACATACAT 86
Db 1746 ACGCACACACACACACACACACACATATATACATATACATATATATATATATATATAT 1805

QY 87 ATGTAACTTGTATATTCCTAT 112
Db 1806 ATATATATATATATATATATATATATATATATATATATATATATATATATATATATAT 1831

RESULT 6
US-11-008-331-1
; Sequence 1, Application US/11008331
; Publication No. US20050244925A1
; GENERAL INFORMATION:
; APPLICANT: Genencor International, Inc.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: GC386-PC1
; CURRENT APPLICATION NUMBER: US/11/008,331
; CURRENT FILING DATE: 2004-12-08
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 2760
; TYPE: DNA
; ORGANISM: Bacillus subtilis
US-11-008-331-1

Query Match          2.6%; Score 47.4; DB 9; Length 2760;
Best Local Similarity 50.5%; Pred. No. 0.05;
Matches 142; Conservative 0; Mismatches 136; Indels 3; Gaps 1;

QY 982 CCAAGTCTTCATCATGCCCATGTTTAAATAGTTCACCTCCATTCGAGGACGGTGAACTGAAA 1041
Db 908 CCGGTCAATATCGATCCCTTTATACAAATGATTTTATCCGCTGAAAAAACAAGAGCTTGAA 967

QY 1042 AAATCTATTGAAAGTTTGGCCGATAGAGTTGGTTCCCTCTAGATAAGATTTTGTCTATT 1101
Db 968 AGCAAAATTTAGAGCTGGCAGATGAGCCCAATATTCGGCTGACCATGTATATGAAGTG 1027

QY 1102 GACGGCTCAAAAAGATCTTCTCATTCAAACGATATTTTACAGGTTTGCCATTCACCTCC 1161
Db 1028 AACATGTGAGAAAAAACAATCGCTGAATGCTATGTTTACAGGAAT---TGGGGCCCAAT 1084

QY 1162 AAGAGAAATGTTTCTTGGACACTTTAGTGAACAGTAATTTCTATGATGAATACGGCT 1221
Db 1085 AAACGGATTTGATTGTGGGATACGACGCTGAACAAACTTTCAGATTCAGAAATTCGTGTT 1144

QY 1222 GTTTTGGCCCATGAATCGTCACTGGCAAAAAAACACCAT 1262
Db 1145 ATTATGGGCCACAAATGGGCCATTTATGTCATGAAGCAGT 1185

RESULT 7
US-11-121-086-16
; Sequence 16, Application US/11121086
; Publication No. US20050266459A1

; GENERAL INFORMATION:
; APPLICANT: POULSEN, TIM S.
; TITLE OF INVENTION: NUCLEIC ACID PROBES AND NUCLEIC ACID ANALOG PROBES
; FILE REFERENCE: 09138.6000-00000
; CURRENT APPLICATION NUMBER: US/11/121.086
; CURRENT FILING DATE: 2005-05-04
; PRIOR APPLICATION NUMBER: 60/567,570
; PRIOR FILING DATE: 2004-05-04
; NUMBER OF SEQ ID NOS: 107
; SOFTWARE: Patent in version 3.3
; SEQ ID NO 16
; LENGTH: 189539
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-121-086-16

Query Match          2.6%; Score 47.4; DB 7; Length 189539;
Best Local Similarity 68.0%; Pred. No. 0.33;
Matches 66; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

QY 38 TACACACACACACATACATCTTACATACATACATACATACATACATACATATATATGTTAACTTG 97
Db 39563 TACATATATATATATATATATATATATATATATATATATATATATATATATATATATAT 39622

QY 98 TATATTCATTCCTATTAAACCAAAAAGAGCAATTAAA 134
Db 39623 TATATATGATATATATATATATCTTAAAGACTCCAAATTAA 39659

RESULT 8
US-10-750-185-49984/C
; Sequence 49984, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; CURRENT FILING DATE: 2003-12-31
; PRIOR APPLICATION NUMBER: US 60/437,482
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 49984
; LENGTH: 2436
; TYPE: DNA
; ORGANISM: Bovine 19866880838322
US-10-750-185-49984

Query Match          2.6%; Score 47.2; DB 6; Length 2436;
Best Local Similarity 59.8%; Pred. No. 0.053;
Matches 79; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 27 ACGAAGCCCTTACACACACACACATACATCTTACATACATACATACATACATACATACATAT 86
Db 1019 ACTCATCTCTGAATACACACACACACACACACACACACATACATACATATATATATATAT 960

QY 87 ATGTAACTTGTATATTCATTCCTATTAAACCAAAAAGAGCAATTTAACTTTTCCTCTT 146
Db 959 ATATATATATGAATATCTTTACTTTTTTAACTAATGAACACAGAAATAATATTTGCATAATTT 900

QY 147 TTTCTACGTCAT 158
Db 899 TATATTCCTCAT 888
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Qy 142 CT 143
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Db 627 CT 626

RESULT 12

US-10-750-185-43144/c
; Sequence 43144, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; CURRENT FILING DATE: 2003-12-31
; PRIOR APPLICATION NUMBER: US 60/437,482
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 43144
; LENGTH: 1140
; TYPE: DNA
; ORGANISM: Bovine 19866880841887
US-10-750-185-43144

Query Match 2.5%; Score 46.4; DB 6; Length 1140;
Best Local Similarity 60.2%; Pred. No. 0.059;
Matches 77; Conservative 0; Mismatches 51; Indels 0; Gaps 0;

Qy 39 ACACACACACATACATCTACATACATACATACATACATACATACATATATGTAACCTTGT 98
|||
Db 549 ACACATGTACATATACATACATACATACATACATACATATACATATATACATATATACAAAC 490
|||
Qy 99 ATATTTCCTATTAAACAAAGAGGCAATTAAACCTTTCCCTCTTTTCTACGTGAT 158
|||
Db 489 ATATACACATATATATACACAAATACATATATACATATATACACATATATACACACAT 430
|||
Qy 159 TTAACAA 166
|||
Db 429 ATATACAA 422

RESULT 13

US-10-750-185-48095/c
; Sequence 48095, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; CURRENT FILING DATE: 2003-12-31
; PRIOR APPLICATION NUMBER: US 60/437,482
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 48095
; LENGTH: 758
; TYPE: DNA
; ORGANISM: Bovine 19866881388566

US-10-750-185-48095

Query Match 2.5%; Score 45.8; DB 6; Length 758;
Best Local Similarity 76.7%; Pred. No. 0.069;
Matches 56; Conservative 0; Mismatches 17; Indels 0; Gaps 0;

Qy 39 ACACACACACATACATCTACATACATACATACATACATACATATATGTAACCTTGT 98
|||
Db 179 ACACACACACACACACACACATATATATACATATATATATATATATATATATATAT 120
|||
Qy 99 ATATTTCCTTCTTA 111
|||
Db 119 GTACACATTCATA 107

RESULT 14

US-10-750-185-51383/c
; Sequence 51383, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; CURRENT FILING DATE: 2003-12-31
; PRIOR APPLICATION NUMBER: US 60/437,482
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 51383
; LENGTH: 2081
; TYPE: DNA
; ORGANISM: Bovine 19866880958299
US-10-750-185-51383

Query Match 2.5%; Score 45.6; DB 6; Length 2081;
Best Local Similarity 50.5%; Pred. No. 0.12;
Matches 111; Conservative 0; Mismatches 109; Indels 0; Gaps 0;

Qy 12 TTCTATCTTCAACAACGAGGCTTACACACACACACATCTACATACATACATA 71
|||
Db 1280 TTTAACACATCCACTATATATACACATTCATACACACACAAACATATGCATACATATA 1221
|||
Qy 72 TACAATATACATATATGTAACCTTGATATATCTTCTTAAACCAAGAGGCAATT 131
|||
Db 1220 TATATATATATATATATATATATATATATATATACACACACACACACTTCCCTGAGTAGCTC 1161
|||
Qy 132 AAACCTTTCCCTCTTTTCTACGTCATTTACTCAAAACCTCTAATTCCTTCGCTCTGTT 191
|||
Db 1160 TACTTTTCTATTGTTGTTGTTGTTTATCAAAATTTTAAACCTCTGTTGATTTGTA 1101
|||
Qy 192 CTGCCATTTTCTCAGAAAAAATCGACGGGAATAAAAA 231
|||
Db 1100 CTTTTAAAGCGGGGAAAAAAGCATGACACTTAACCAACA 1061

RESULT 15

US-10-750-185-51049/c
; Sequence 51049, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen

```

; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; CURRENT FILING DATE: 2003-12-31
; PRIOR APPLICATION NUMBER: US 60/437,482
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 51049
; LENGTH: 4018
; TYPE: DNA
; ORGANISM: Bovine 19866881035953
US-10-750-185-51049

Query Match      2.5%; Score 45.6; DB 6; Length 4018;
Best Local Similarity 62.1%; Pred. No. 0.16;
Matches 72; Conservative 0; Mismatches 44; Indels 0; Gaps 0;

QY      9 TTTTTCCTATCTTCAACAGCAACGCTTACACACACACACACATACATCTACATACAT 68
Db      1942 TCTCTTTATGGTCCAGTTCTCACATCCGTCATGAATATACATATACATATATAT 1883

QY      69 ACATACAAATATACATATATGTAACCTTGATATTCATTCCCTATTAAACCAAAAGA 124
Db      1882 ATATATATATATATATATATACTACATGATATATATATATATATATATACTACATGA 1827

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Job time : 177.444 secs

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Title: US-09-165-460A-3
Perfect score: 2948
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Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 3392430 seqs, 186927314 residues

Total number of hits satisfying chosen parameters: 6784860

Minimum DB seq length: 0
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Listing first 45 summaries

Database : Published Applications NA New:
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2: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq.*
3: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq.*
4: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq.*
5: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
6: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
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9: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq3.*
10: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	58.4	2.0	177175	7	US-11-121-086-79 Sequence 79, Appl
2	55.8	1.9	600	6	US-10-750-185-20190 Sequence 20190, A
3	55.8	1.9	2531	6	US-10-750-185-40015 Sequence 40015, A
4	46.6	1.6	173602	7	US-11-121-086-25 Sequence 25, Appl
5	45.6	1.5	1082144	7	US-11-117-187-211 Sequence 211, Appl
6	45.4	1.5	799	6	US-10-750-185-47320 Sequence 47320, A
7	45.2	1.5	1146	6	US-10-750-185-60546 Sequence 60546, A
8	45	1.5	1204	6	US-10-750-185-27810 Sequence 27810, A
9	45	1.5	2828	6	US-10-750-185-53409 Sequence 53409, A
10	44.8	1.5	1486	6	US-10-750-185-47204 Sequence 47204, A
11	44.6	1.5	151169	7	US-11-121-086-38 Sequence 38, Appl
12	44.2	1.5	156735	7	US-11-121-086-93 Sequence 93, Appl
13	43.6	1.5	1110	7	US-11-186-284-219 Sequence 219, Appl
14	43.6	1.5	1115	7	US-11-186-284-218 Sequence 218, Appl
15	43.6	1.5	1163	7	US-11-186-284-216 Sequence 216, Appl
16	42.8	1.5	3059	6	US-10-750-185-25437 Sequence 25437, A
17	42.8	1.5	3254	6	US-10-750-185-4202 Sequence 4202, Ap
18	42.8	1.5	3520	6	US-10-793-626-3549 Sequence 3549, Ap
19	42.6	1.4	150173	7	US-11-112-908-26 Sequence 26, Appl
20	42.6	1.4	171247	7	US-11-112-908-27 Sequence 27, Appl
21	42.6	1.4	172781	7	US-11-112-908-25 Sequence 25, Appl
22	42.2	1.4	171486	7	US-11-121-086-105 Sequence 105, Appl
23	41.8	1.4	138821	7	US-11-121-086-80 Sequence 80, Appl

c	24	41.6	1.4	1438	6	US-10-750-185-43641	Sequence 43641, A
	25	41.6	1.4	146656	7	US-11-121-086-68	Sequence 68, Appl
	26	41.6	1.4	190882	7	US-11-121-086-69	Sequence 69, Appl
	27	41.4	1.4	1464	6	US-10-750-185-33014	Sequence 33014, A
	28	41.4	1.4	3207	6	US-10-750-185-62659	Sequence 62659, A
c	29	41.2	1.4	139054	7	US-11-121-086-96	Sequence 96, Appl
	30	41	1.4	173602	7	US-11-121-086-25	Sequence 25, Appl
	31	40.8	1.4	842	6	US-10-750-185-48632	Sequence 48632, A
c	32	40.6	1.4	2180	6	US-10-750-185-63963	Sequence 63963, A
	33	40.4	1.4	1732	6	US-10-750-185-60909	Sequence 60909, A
	34	40.4	1.4	1926	6	US-10-750-185-52315	Sequence 52315, A
	35	40.4	1.4	143389	7	US-11-112-908-30	Sequence 30, Appl
	36	40.4	1.4	150314	7	US-11-112-908-24	Sequence 24, Appl
	37	40.2	1.4	182303	7	US-11-121-086-45	Sequence 45, Appl
	38	40	1.4	79528	6	US-10-276-233A-6	Sequence 6, Appl
c	39	40	1.4	340000	7	US-11-102-978-3	Sequence 3, Appl
	40	40	1.4	1082144	7	US-11-117-187-211	Sequence 211, App
c	41	39.6	1.3	1483	6	US-10-750-185-39052	Sequence 39052, A
c	42	39.4	1.3	2392	7	US-11-045-802-4	Sequence 4, Appl
c	43	39.4	1.3	3819	6	US-10-131-826A-405	Sequence 405, App
c	44	39.2	1.3	495	6	US-10-131-826A-533	Sequence 533, App
	45	39.2	1.3	171486	7	US-11-121-086-105	Sequence 105, App

ALIGNMENTS

RESULT 1
US-11-121-086-79
; Sequence 79, Application US/11121086
; Publication No. US20050266459A1
; GENERAL INFORMATION:
; APPLICANT: POULSEN, TIM S.
; APPLICANT: NIELSEN, KIRSTEN V.
; TITLE OF INVENTION: NUCLEIC ACID PROBES AND NUCLEIC ACID ANALOG PROBES
; FILE REFERENCE: 09138.6000-00000
; CURRENT APPLICATION NUMBER: US/11/121.086
; CURRENT FILING DATE: 2005-05-04
; PRIOR APPLICATION NUMBER: 60/567,570
; PRIOR FILING DATE: 2004-05-04
; NUMBER OF SEQ ID NOS: 107
; SOFTWARE: Patent in version 3.3
; SEQ ID NO 79
; LENGTH: 177175
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-121-086-79

Query Match	2.0%;	Score 58.4;	DB 7;	Length 177175;
Best Local Similarity	47.8%;	Pred. No. 0.0059;		
Matches 170;	Conservative	0;	Mismatches 186;	Indels 0; Gaps 0;
QY	586	AATGATTAAATTTGAAACCATCTTTGGCGTAGCGAAGATTGATATCCCTATTTCTGTAG	645	
DB	55385	AATGTTGAATTTGATAGACGAGAAAACCTTTTAGAAGGTATATATATGTGTATATATATA	55444	
QY	646	GCAAGTGACAAAATAAAAAACATTAGAAAAATTTCTCGTTACTTTTCTTATAGATATAG	705	
DB	55445	TTTAGTATATATATGTATATATATTTATATATATGTATATATTTTATATATATGTGTAT	55504	
QY	706	ATATATGTATGCTTTGTCTTATAGATGAAGGTATTTATCGCGTCCCTTTGTATCCCTATTA	765	
DB	55505	AUTATATTTATATATATGTGTATATATATTTATATATATATATATATATATATATTTTATTA	55564	
QY	766	TTAATAAAATTCCTTTTAAATGCAATTTCTGGTGCCTTTTGTGCGTCTCTGTATTTTTTT	825	
DB	55565	CTTATATATTCATATACACAAAATGAGGATGTTAACATTTTCTACTATTATAACACATTT	55624	
QY	826	TTTTTTGGACCACTGGATGGAAAAACCTTTGTATGATTTTATACCTTTTATTTTAACTTACT	885	
DB	55625	TTTATTCCTATGGTGGTCATACGTCCTAAGTTGCTATTAITTTCAITTTGGCTTTAATAAT	55684	
QY	886	AAAATATCGAGATTTTCAGGAACAAACATAGAAATTTCTTTGTGCAAGAAAAATAAA	941	

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Db 55685 TAAATAAGATAATTTCAATGTAATAAAACGGGAATTTGTAATATATATATATAAACATA 55740
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RESULT 2
US-10-750-185-20190
; Sequence 20190, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; PRIOR FILING DATE: 2003-12-31
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 20190
; LENGTH: 600
; TYPE: DNA
; ORGANISM: Bovine MMBT04400
US-10-750-185-20190

Query Match 1.9%; Score 55.8; DB 6; Length 600;
Best Local Similarity 55.4%; Pred. No. 0.002;
Matches 108; Conservative 0; Mismatches 87; Indels 0; Gaps 0;

Qy 673 AAAAAATTCGTTACTCTTTCTTATAGATATAGATATATGTTGCTTATAGATGA 732
Db 394 AACTTATCTGGATTTTTCAGATACATGCTGTAATCATATATATATATATAT 453
Qy 733 AGGTATTTATCGGTCCTTTGTAATCCCTATTAATAAAATCTTTTAAATGCAATTT 792
Db 454 AGTCAATATTCCTCAAAATCTTACAAATCTTTTATATATATATATATATATAT 513
Qy 793 TCTGGTCTCTTTGTTGCTTCTGTAATTTTCTTATGACACCTGGATGAAAAACCT 852
Db 514 TCATTTCTGGTCTTATGCTCTTATATATATGTTCTTCTTTGATCAATGAATATGGCT 573
Qy 853 TTGATGATTTTATTA 867
Db 574 TTGTGAATTTTTC 588

RESULT 3
US-10-750-185-40015
; Sequence 40015, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; CURRENT FILING DATE: 2003-12-31
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 40015
; LENGTH: 2531
; TYPE: DNA
; ORGANISM: Bovine 19866880831842
US-10-750-185-40015

Query Match 1.9%; Score 55.8; DB 6; Length 2531;
Best Local Similarity 55.4%; Pred. No. 0.0036;
Matches 108; Conservative 0; Mismatches 87; Indels 0; Gaps 0;

Qy 673 AAAAAATTCGTTACTCTTTCTTATAGATATAGATATATGTTGCTTATAGATGA 732
Db 950 AAACTTATCTTGGATTTTTCAGATACATGCTGTAATCATATATATATATATAA 1009
Qy 733 AGGTATTTATCGGTCCTTTGTAATCCCTATTAATAAAATCTTTTAAATGCAATTT 792
Db 1010 AGTCAATATTCCTCAAAATCTTACAAATCTTTTATATATATATATATATATAT 1069
Qy 793 TCTGGTCTCTTTGTTGCTTCTGTAATTTTCTTATGACACCTGGATGAAAAACCT 852
Db 1070 TCATTTCTGGTCTTATGCTTCTATATATATGTTCTTCTTGTATCAATTAATGGCT 1129
Qy 853 TTGATGATTTTATTA 867
Db 1130 TTGTGAATTTTTC 1144

RESULT 4
US-11-121-086-25/c
; Sequence 25, Application US/11121086
; Publication No. US20050266459A1
; GENERAL INFORMATION:
; APPLICANT: POULSEN, TIM S.
; APPLICANT: NIELSEN, KIRSTEN V.
; TITLE OF INVENTION: NUCLEIC ACID PROBES AND NUCLEIC ACID ANALOG PROBES
; FILE REFERENCE: 09138.6000-00000
; CURRENT APPLICATION NUMBER: US/11/121,086
; CURRENT FILING DATE: 2005-05-04
; PRIOR APPLICATION NUMBER: 60/567,570
; PRIOR FILING DATE: 2004-05-04
; NUMBER OF SEQ ID NOS: 107
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 25
; LENGTH: 173602
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-121-086-25

Query Match 1.6%; Score 46.6; DB 7; Length 173602;
Best Local Similarity 49.5%; Pred. No. 2.5;
Matches 149; Conservative 0; Mismatches 149; Indels 3; Gaps 1;

Qy 653 AAAAAATAAAAAACATTTAGAAAAAATTCGTTACTCTTTCTTATAGATATAGATATATG 712
Db 136565 ACATAAACATATAAAATATATAATATACTATAATAATAATATATAATAATAATAA 136506
Qy 713 TATGGTTTCTTATAGATGAAGTATTTATCGGTCCTTTGTATTCCTTATTATTAATAA 772
Db 136505 TATATATATATTTATAATATAGTATATAT---TTATATAGATTTATATAATTTATAT 136449
Qy 773 AATTCCTTTTAAATGCAATTTCTGGTGCTCTTTGTTGCTTCCTGTAATTTTTTTTTTTTG 832
Db 136448 ATTTTATATATATATAATAATTTATATATATTTATATATATATAATAATAATATAT 136389
Qy 833 GACCACTGGATGAAAAACCTTTGATGATTTTATACCTTTTATTTAAGTTACTAAATAT 892
Db 136388 TTATATATATATATAAATTTATATATATATATATATATATAATAATAATAATAAT 136329
Qy 893 CGAGATTTTCAGGAACAAACATAGAAATTTCTTTGTCAAGAAAAATAAACGAAAAATAAT 952
Db 136328 ATATAATATATAAATTTATATAATTTATATATATATATATATATAATAATAATAA 136269
Qy 953 T 953
Db 136268 T 136268
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; TYPE: DNA
; ORGANISM: Bovine 19866880831842
US-10-750-185-40015

Query Match 1.9%; Score 55.8; DB 6; Length 2531;
Best Local Similarity 55.4%; Pred. No. 0.0036;
Matches 108; Conservative 0; Mismatches 87; Indels 0; Gaps 0;

Qy 673 AAAAAATTCGTTACTCTTTCTTATAGATATAGATATATGTTGCTTATAGATGA 732
Db 950 AAACTTATCTTGGATTTTTCAGATACATGCTGTAATCATATATATATATAATAA 1009
Qy 733 AGGTATTTATCGGTCCTTTGTAATCCCTATTAATAAAATCTTTTAAATGCAATTT 792
Db 1010 AGTCAATATTCCTCAAAATCTTACAAATCTTTTATATATATATATATATATAT 1069
Qy 793 TCTGGTCTCTTTGTTGCTTCTGTAATTTTCTTATGACACCTGGATGAAAAACCT 852
Db 1070 TCATTTCTGGTCTTATGCTTCTATATATATGTTCTTCTTGTATCAATTAATGGCT 1129
Qy 853 TTGATGATTTTATTA 867
Db 1130 TTGTGAATTTTTC 1144

RESULT 4
US-11-121-086-25/c
; Sequence 25, Application US/11121086
; Publication No. US20050266459A1
; GENERAL INFORMATION:
; APPLICANT: POULSEN, TIM S.
; APPLICANT: NIELSEN, KIRSTEN V.
; TITLE OF INVENTION: NUCLEIC ACID PROBES AND NUCLEIC ACID ANALOG PROBES
; FILE REFERENCE: 09138.6000-00000
; CURRENT APPLICATION NUMBER: US/11/121,086
; CURRENT FILING DATE: 2005-05-04
; PRIOR APPLICATION NUMBER: 60/567,570
; PRIOR FILING DATE: 2004-05-04
; NUMBER OF SEQ ID NOS: 107
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 25
; LENGTH: 173602
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-121-086-25

Query Match 1.6%; Score 46.6; DB 7; Length 173602;
Best Local Similarity 49.5%; Pred. No. 2.5;
Matches 149; Conservative 0; Mismatches 149; Indels 3; Gaps 1;

Qy 653 AAAAAATAAAAAACATTTAGAAAAAATTCGTTACTCTTTCTTATAGATATAGATATATG 712
Db 136565 ACATAAACATATAAAATATATAATATACTATAATAATAATATATAATAATAATAA 136506
Qy 713 TATGGTTTCTTATAGATGAAGTATTTATCGGTCCTTTGTATTCCTTATTATTAATAA 772
Db 136505 TATATATATATTTATAATATAGTATATAT---TTATATAGATTTATATAATTTATAT 136449
Qy 773 AATTCCTTTTAAATGCAATTTCTGGTGCTCTTTGTTGCTTCCTGTAATTTTTTTTTTTTG 832
Db 136448 ATTTTATATATATATAATAATTTATATATATTTATATATATATAATAATAATATAT 136389
Qy 833 GACCACTGGATGAAAAACCTTTGATGATTTTATACCTTTTATTTAAGTTACTAAATAT 892
Db 136388 TTATATATATATATAAATTTATATATATATATATATATATAATAATAATAATAAT 136329
Qy 893 CGAGATTTTCAGGAACAAACATAGAAATTTCTTTGTCAAGAAAAATAAACGAAAAATAAT 952
Db 136328 ATATAATATATAAATTTATATAATTTATATATATATATATATAATAATAATAA 136269
Qy 953 T 953
Db 136268 T 136268
```

RESULT 5
US-11-117-187-211/c
; Sequence 211, Application US/11117187
; Publication No. US20050266560A1
; GENERAL INFORMATION:
; APPLICANT: PREUSS, DAPHNE
; APPLICANT: COPENHAVER, GREGORY
; TITLE OF INVENTION: PLANT ARTIFICIAL CHROMOSOME COMPOSITIONS AND METHODS
; FILE REFERENCE: ARCD:309US
; CURRENT APPLICATION NUMBER: US/11/117,187
; CURRENT FILING DATE: 2005-04-28
; PRIOR APPLICATION NUMBER: US/09/531,120
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 60/125,219
; PRIOR FILING DATE: 1999-03-18
; NUMBER OF SEQ ID NOS: 212
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 211
; LENGTH: 1082144
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-11-117-187-211

Query Match 1.5%; Score 45.6; DB 7; Length 1082144;
Best Local Similarity 54.9%; Pred. No. 8.9;
Matches 90; Conservative 0; Mismatches 74; Indels 0; Gaps 0;

Qy 626 GATATCCCTATTCTGTAGGCAAGTGACAAATAAAAAACATTAAGAAAAATCTCGT 685
Db 622639 GATCTGTAGATCTGGTTGAGAAATAATAGATGAGAAACGAAACCAACGTTCTG 622580

Qy 686 TACTTTTCTTATAGATATAGATATGATGTTGCTTATAGATGAAGGTATTTATCGC 745
Db 622579 TTTGGTTTTTGAGTTTGGATTTTGTCTCTGTGCAATAGTTTTTTTTTTTTTTCGT 622520

Qy 746 GTCCTTGTATCCCTATATTAATAAATCTTTTAAATGCA 789
Db 622519 TTTCTTGTACTTGTGTTTATGTAATCATGTATATAAATGAA 622476

RESULT 6
US-10-750-185-47320/c
; Sequence 47320, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; CURRENT FILING DATE: 2003-12-31
; PRIOR APPLICATION NUMBER: US 60/437,482
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 47320
; LENGTH: 799
; TYPE: DNA
; ORGANISM: Bovine 19866881621539
US-10-750-185-47320

Query Match 1.5%; Score 45.4; DB 6; Length 799;
Best Local Similarity 51.8%; Pred. No. 0.46;
Matches 103; Conservative 0; Mismatches 96; Indels 0; Gaps 0;

Qy 92 ACACAGAATTTCTTGAATTAATGAGTTATATATGATGAGGGAGACCGTAGGCCA 151

Db 288 AAAAGTAAATATCATCAATAAATGAGATTATTTTAGTAAATTTATGAAAGCATAGTTTT 229
Qy 152 AAGGAAGTAAATTTACAGATTTTATTTACTTCAGCTGTTTACGATATCGAAGCATTT 211
Db 228 ATTTAACTGACTTAAACAGTTGCTGGTATTGTTTACCAAGTTTAGGAAGATAAAAGCCATT 169
Qy 212 TGCAACTTGAAGTTAGTTTCAAACTTATCCAAATTTTAAATAAACAGGTCAGTACC 271
Db 168 TTTAATGAAGNATTTTCTCAATTTGTTATGAAGCTACTGCAGGAATATGTCAGAAC 109
Qy 272 CTAAAAACAACACTCAAAAGC 290
Db 108 ATCAAAATTTATGCAAAAGC 90

RESULT 7
US-10-750-185-60546/c
; Sequence 60546, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; CURRENT FILING DATE: 2003-12-31
; PRIOR APPLICATION NUMBER: US 60/437,482
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 60546
; LENGTH: 1146
; TYPE: DNA
; ORGANISM: Bovine 19866881175028
US-10-750-185-60546

Query Match 1.5%; Score 45.2; DB 6; Length 1146;
Best Local Similarity 49.2%; Pred. No. 0.59;
Matches 119; Conservative 0; Mismatches 123; Indels 0; Gaps 0;

Qy 648 AAGTGACAAAATAAAAAACATTAAGAAAAATTTCTCGTACTTTCTTATAGATATAGAT 707
Db 1102 ATGTAAGTAAAAAAGCAATTAAGAAATTTATTTTATTTATTTCAACAGTGAGAAAG 1043

Qy 708 ATATGATGTTGCTTTATAGATGAAGTATTTATCGCTCTTTGTATTTCCCTATTATT 767
Db 1042 ATACAAAGTACTCGCTGTCTGTTATTTAATGCTCACTTTTAAAGAGTAAATTC 983

Qy 768 AATAAAATTTCTTTAAATGCAATTTCTGGTGCCTTTTGTGTTCTGTATTTTTTTTT 827
Db 982 ATTTAGTTACTTGTAAACACAAAATGTGGACAAAATATATGCTAGAGTAATGCTAGTT 923

Qy 828 TTTTGGACCACTGGATGGAACCTTTGATGATTTTATTTATTTTAAAGTTACTAA 887
Db 922 TTTCTCTTTGTAAGAAAGATACACTATGTTATTTTATTTTAAATTTTCTGTGTACAGGAA 863

Qy 888 AA 889
Db 862 AA 861

RESULT 8
US-10-750-185-27810/c
; Sequence 27810, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.

```
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; PRIOR FILING DATE: 2003-12-31
; PRIOR FILING DATE: 2003-12-31
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 27810
; LENGTH: 1204
; TYPE: DNA
; ORGANISM: Bovine 19866881865325
US-10-750-185-27810

Query Match      1.5%; Score 45; DB 6; Length 1204;
Best Local Similarity 45.2%; Pred. No. 0.67;
Matches 165; Conservative 0; Mismatches 200; Indels 0; Gaps 0;

Qy 690 TTCTTATAGATATAGATATATGATGTTGGTTGCTTATAGATGAGGTATTTATCGCGTCC 749
Db 1203 TATGTTAAAGTAAATTTAGTTACATGTATATGTTTCTTATCAGTGTCCCATATGATTC 1144

Qy 750 TTTGTATTCCTATTATTAATAAAATTCCTTTAAATGCAATTTCTGGTGCCTCTTTTGT 809
Db 1143 TTAATATTTTCATAGAAATTTTATATTTTAAATAATTTCTTATTCATCTCTTCT 1084

Qy 810 GCTTCTGATTTTTTTTTTTGGACCACTGGATGAGAAACCTTTGATGATTTTATACC 869
Db 1083 CCAACTTCTGCTGAATGCTGGAACTCCAAATGTAATTTATTTTGGTGGTTTTTCTC 1024

Qy 870 TTTATTTTACTTAAATATCGAGATTTTCAGGACAAACATAGAAATTTCTTTGTC 929
Db 1023 CTGATCTTAAATCATTCAGAAATAGTTCTCTGCTCTCTGCGCAAGAGGTGTGTTAT 964

Qy 930 AAGAAATAAAGCAAAATTAATGATGCTTTGACTACTGACTGCTGTCTGTCATAGAGAGAA 989
Db 963 CTGACTGCTCAACCCAGGATGAGTGCATATTTTCACTTTATTCCTCCAGTCAGCT 904

Qy 990 CCAGAACAGCAATGCTACAAATTCACAACTTTAGTGTCTCTATAGATCTCCATATCCT 1049
Db 903 CCTGGACTCAAACTTCTTTTGTGTCAAATCTCATGTTTGCATTCCTCAATTTCTTTGACC 844

Qy 1050 ATGTG 1054
Db 843 TTGTG 839

RESULT 9
US-10-750-185-53409/c
; Sequence 53409, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; PRIOR FILING DATE: 2003-12-31
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 53409
; LENGTH: 2828
; TYPE: DNA
; ORGANISM: Bovine 19866880569397
US-10-750-185-53409

Query Match      1.5%; Score 45; DB 6; Length 2828;
Best Local Similarity 53.0%; Pred. No. 0.96;
Matches 96; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

Qy 609 TTGGCGTAGCGAAGATTGATATCCCTATTTCTGTTAGCGAAGTGACAAAATAAAAAACA 668
Db 1762 TTCTCCAGCAATTTGTTGATATCTAGATCAATTTTGTAGGTAAAAATAAAATCACAGT 1703

Qy 669 TTAGAAAAAATCTCGTTACTTTTCTTATAGATATAGATATATGTTGCTTATAG 728
Db 1702 TTAGAACCTATAGATCTGCTCTCTCTTTTGAAGGTAATGACACTTTCTCTCTGT 1643

Qy 729 ATGAAGGTATTTATCGCGTCTCTTTGTTATTCCTATTTTAAATAAAATCTTTTAAAAATGC 788
Db 1642 TTAAAGATAAGAAACGGAATGATTCGATTCCTATTTTAAATAGATTTTATCAACAATGA 1583

Qy 789 A 789
Db 1582 A 1582

RESULT 10
US-10-750-185-47204
; Sequence 47204, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; PRIOR FILING DATE: 2003-12-31
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 47204
; LENGTH: 1486
; TYPE: DNA
; ORGANISM: Bovine 19866880599831
US-10-750-185-47204

Query Match      1.5%; Score 44.8; DB 6; Length 1486;
Best Local Similarity 43.4%; Pred. No. 0.81;
Matches 205; Conservative 0; Mismatches 267; Indels 0; Gaps 0;

Qy 496 TGTGAACCTTGGAAATTTAATAAGGACATTAAGGAACTTTTAATTCGAATTTGAAAGCTG 555
Db 325 TGTGTCTTTTAAATTTACATTCAGAAAAAGACACCATTCAATATAATAATGGTTTATATT 384

Qy 556 CCTATGTTGAGTTTATTTGCGTTCGAGTAATGATTAATTTGAAAAACCATCTTCGCGT 615
Db 385 CTTAGTGCTTACTTCTATATGAGTGAAGAAATTTGAAATTTTACTCTCTATATGAAGT 444

Qy 616 AGCGAAGATTGATATCCCTATTTCTGTTAGGCAAGTGACAAAATAAAAAACATTAGAAA 675
Db 445 ATAAATGATTTTATAATATTAGTTTCATGTGACAAATACAGTATTGAACTCTTTTATAGA 504

Qy 676 AAATTCGTTACTTTTCTTATAGATATAGATATATGTTGCTTATAGATGAAGG 735
Db 505 CTATACTCCTAAAGTTTATTACAAAATAATGACTATATTTTGTGCTGTGTGACAAATAT 564
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QY 736 TATTATCGCGTCCTTGTTGATTCCTCTATTATTAATAAAATCTTTTAAAAATGCAATTTCT 795
DB 565 AGCTTTGTTACTATCTATTTTACATTTTACATAAATATTGATAGTTTGATACCTAAATA 624
QY 796 GGTGCTCTTTTGTGCTCTCTGCTGCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 855
DB 625 CATACCTCTAICTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 684
QY 856 ATGATTTTATTTACCTTTATTTTAACTTACTAAATATCGAGATTTTCAGAACAAACATA 915
DB 685 ATTTTGAATATACATTTTGTGTTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGT 744
QY 916 GAATTTTCTTCTGCAAGAAAATAAAACGAAATAAATGATCTTTGACTAC 967
DB 745 TGACTTTCTCTGGCTTATTTTCATGAGACAAATACCTCTAGTCCATCTAC 796

RESULT 11
US-11-121-086-38
; Sequence 38, Application US/11121086
; Publication No. US20050266459A1
; GENERAL INFORMATION:
; APPLICANT: POULSEN, TIM S.
; APPLICANT: NIELSEN, KIRSTEN V.
; TITLE OF INVENTION: NUCLEIC ACID PROBES AND NUCLEIC ACID ANALOG PROBES
; FILE REFERENCE: 09138.6000-00000
; CURRENT APPLICATION NUMBER: US/11/121,086
; CURRENT FILING DATE: 2005-05-04
; PRIOR FILING DATE: 2004-05-04
; NUMBER OF SEQ ID NOS: 107
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 151169
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-121-086-38

Query Match 1.5%; Score 44.6; DB 7; Length 151169;
Best Local Similarity 49.5%; Pred. No. 6.5;
Matches 148; Conservative 0; Mismatches 144; Indels 7; Gaps 1;

QY 658 ATAAAAACATAGAAAAATTCGTTACTTTCTTATAGATATAGATATGATGATGG 717
DB 47316 ATATTATATATATATATATTTATTTATATATATATATATTTATATATATAAAT 47375
QY 718 TTGCTTATAGATGAGGTATTTATCGCGCTCTTTGATTCCTCTATTATTAATAAAATTC 777
DB 47376 ATATAATACATAAATTAATATAT- - - - -TATATATAAATAAATAATATATATTA 47428
QY 778 TTTTAAATGCAATTTCTGGTGCCTTTGTTGCTTCTGATATTTTCTTTTCTTTTCTGGACCA 837
DB 47429 TATTCATATATATATATATTTATATTTATATATATATATATATATATATATATATA 47488
QY 838 CTGGATGGAACCTTTGATGATTTTATACCTTTTATTTTAACTTAAATATCGAGA 897
DB 47489 TTATATATATAAATATATAATATATATTTATATAAATATATATCTTTATATAAATAAATA 47548
QY 898 TTTTCAGGAACAAACATAGAAATTTCTTTGTCAAGAAAATAAAACGAAATAAATTTGAT 956
DB 47549 TATATATAAATAATATATATATATATAAATAAATAAATAAATAAATAAATAAATAAAT 47607

RESULT 12
US-11-121-086-93/c
; Sequence 93, Application US/11121086
; Publication No. US20050266459A1
; GENERAL INFORMATION:
; APPLICANT: POULSEN, TIM S.
; APPLICANT: NIELSEN, KIRSTEN V.
; TITLE OF INVENTION: NUCLEIC ACID PROBES AND NUCLEIC ACID ANALOG PROBES
; FILE REFERENCE: 09138.6000-00000
; CURRENT APPLICATION NUMBER: US/11/121,086
```

```
; CURRENT FILING DATE: 2005-05-04
; PRIOR FILING DATE: 60/567,570
; NUMBER OF SEQ ID NOS: 107
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 93
; LENGTH: 156735
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-121-086-93

Query Match 1.5%; Score 44.2; DB 7; Length 156735;
Best Local Similarity 52.4%; Pred. No. 8;
Matches 121; Conservative 0; Mismatches 108; Indels 2; Gaps 1;

QY 695 TATAGATATAGATATATGTTGTTTCTTATAGATGAGGTATTTATCGCGTCTCTTTGT 754
DB 142565 TATATTTATATATAAATGTTATAAATACATTTATATATAAGTATTTATATATATAT 142506
QY 755 ATTCCTTATTAATAAAAAATCTTTAAAAATGCAATTTCTGTCGCTCTTTGTTGCTTC 814
DB 142505 AGAAAATGATTTTATATTTGTTATTAATAATTTACAT--AAAATATATTTGCATATAT 142448
QY 815 TGTATTTTCTTTTGGACCACTGGATGGAACCTTTGATGATTTTATACCTTTAT 874
DB 142447 TATATATCTCTTATGTCATATAAGTATATCAATAAATATATATTTATGATATAAATTTAT 142388
QY 875 TTTAAGTTACTAAATATCGAGATTTTCAGGAACAAACATAGAAATTTTCTT 925
DB 142387 ATAAAATGTTATAAAATTTTATGTTTATTAATAATATAAATATATTTATGTT 142337

RESULT 13
US-11-186-284-219/c
; Sequence 219, Application US/11186284
; Publication No. US20050266493A1
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals, Inc.
; APPLICANT: Berger, Allison
; APPLICANT: Guillemette, Tracy L.
; APPLICANT: Kamatkar, Shubhangi
; APPLICANT: Schlegel, Robert
; APPLICANT: Monahan, John E.
; APPLICANT: Thibodeau, Stephen N.
; APPLICANT: Bugart, Lawrence J.
; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
; TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
; FILE REFERENCE: MPM01-029P2RNM
; CURRENT APPLICATION NUMBER: US/11/186,284
; CURRENT FILING DATE: 2005-07-21
; PRIOR APPLICATION NUMBER: US/10/301,822
; PRIOR FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US 60/339,971
; PRIOR FILING DATE: 2001-12-10
; PRIOR APPLICATION NUMBER: US 60/361,978
; PRIOR FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 60/381,988
; PRIOR FILING DATE: 2002-05-20
; NUMBER OF SEQ ID NOS: 228
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 219
; LENGTH: 1110
; TYPE: DNA
; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (49)...(804)
US-11-186-284-219

Query Match 1.5%; Score 43.6; DB 7; Length 1110;
Best Local Similarity 52.2%; Pred. No. 1.3;
Matches 97; Conservative 0; Mismatches 89; Indels 0; Gaps 0;
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Db 1049 TTTTCTTTTAAAGGTTTTTATTTGGTCTCCTAGAAATTAAGGTCCTTAGTTAGT 990
QY 2335 TCCAATAGAGATAACGAGCATGCTGCGTACTACATCAAGCGATAAGCGATCGCTAGT 2394
Db 989 TTTATTGGAGATAAAACAGCGAAGTCCCAACATACCCTACCAAGACACAAGGTGCG 930
QY 2395 CAAAGG 2400
Db 929 CAGACG 924

RESULT 14
US-11-186-284-218/c
; Sequence 218, Application US/11186284
; Publication No. US20050266493A1
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals, Inc.
; APPLICANT: Berger, Allison
; APPLICANT: Guillemette, Tracy L.
; APPLICANT: Kamatkar, Shubhangi
; APPLICANT: Schlegel, Robert
; APPLICANT: Monahan, John E.
; APPLICANT: Burgart, Lawrence J.
; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
; TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
; TITLE OF INVENTION: THERAPY OF COLON CANCER
; FILE REFERENCE: MPM01-029P2RNM
; CURRENT APPLICATION NUMBER: US/11/186,284
; PRIOR FILING DATE: 2005-07-21
; PRIOR APPLICATION NUMBER: US/10/301,822
; PRIOR FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US 60/339,971
; PRIOR FILING DATE: 2001-12-10
; PRIOR APPLICATION NUMBER: US 60/361,978
; PRIOR FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 60/381,988
; PRIOR FILING DATE: 2002-05-20
; NUMBER OF SEQ ID NOS: 228
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 218
; LENGTH: 1115
; TYPE: DNA
; ORGANISM: Homo Sapiens
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; NAME/KEY: CDS
; LOCATION: (49)...(699)
US-11-186-284-218

Query Match 1.5%; Score 43.6; DB 7; Length 1115;
Best Local Similarity 52.2%; Pred. No. 1.3;
Matches 97; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

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; Sequence 216, Application US/11186284
; Publication No. US20050266493A1
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals, Inc.
; APPLICANT: Berger, Allison
; APPLICANT: Guillemette, Tracy L.
; APPLICANT: Kamatkar, Shubhangi
; APPLICANT: Schlegel, Robert
; APPLICANT: Monahan, John E.
; APPLICANT: Burgart, Lawrence J.
; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
; TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
; TITLE OF INVENTION: THERAPY OF COLON CANCER
; FILE REFERENCE: MPM01-029P2RNM
; CURRENT APPLICATION NUMBER: US/11/186,284
; PRIOR FILING DATE: 2005-07-21
; PRIOR APPLICATION NUMBER: US/10/301,822
; PRIOR FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US 60/339,971
; PRIOR FILING DATE: 2001-12-10
; PRIOR APPLICATION NUMBER: US 60/361,978
; PRIOR FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 60/381,988
; PRIOR FILING DATE: 2002-05-20
; NUMBER OF SEQ ID NOS: 228
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 216
; LENGTH: 1163
; TYPE: DNA
; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (49)...(699)
US-11-186-284-216

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QY 2335 TCCAATAGAGATAACGAGCATGCTGCGTACTACATCAAGCGATAAGCGATCGCTAGT 2394
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QY 2395 CAAAGG 2400
Db 982 CAGACG 977

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: December 8, 2005, 18:21:55 ; Search time 2340.24 Seconds
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Gapop 10.0 , Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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3	108.4	3.7	177	3	US-09-864-408A-91
4	62.2	2.1	341	7	US-10-021-323-451
5	61.8	2.1	528	7	US-10-021-323-8131
6	61.8	2.1	8056	8	US-10-473-126-386
7	61.6	2.1	3673778	6	US-10-312-841-2
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44 56.2 1.9 6181 7 US-10-221-613-232 Sequence 232, App
45 56.2 1.9 10286 5 US-10-239-676-14 Sequence 14, Appl

ALIGNMENTS

RESULT 1
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; Sequence 3, Application US/10646950
; Publication No. US20040072296A1
; GENERAL INFORMATION:
; APPLICANT: Rine, Jasper
; APPLICANT: Boyartchuk, Victor L
; APPLICANT: Ashby, Matthew N
; TITLE OF INVENTION: AFCl and RCE1: Isoprenylated CAAX Processing Enzymes
; FILE REFERENCE: B96-021-3
; CURRENT APPLICATION NUMBER: US/10/646,950
; CURRENT FILING DATE: 2003-08-21
; PRIOR APPLICATION NUMBER: 60/023,491
; PRIOR FILING DATE: 1996-08-07
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 2948
; TYPE: DNA
; ORGANISM: Saccharomyces cerevisiae
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1001)..(1945)
US-10-646-950-3

Query Match 100.0%; Score 2948; DB 7; Length 2948;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2948; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 QY 2941 GAATCACCA 2948
 Db 2941 GAATCACCA 2948

RESULT 2
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 ; Publication No. US20040161840A1
 ; GENERAL INFORMATION:
 ; APPLICANT: CONTRERAS, ROLAND HENRI
 ; APPLICANT: EBERHARDT, INES
 ; APPLICANT: LUYTEN, WALTER HERMAN MARIA LOUIS
 ; APPLICANT: REEKMAN, RIEKA JOSEPHINA
 ; TITLE OF INVENTION: BAX-RESPONSIVE GENES FOR DRUG TARGET IDENTIFICATION IN
 ; TITLE OF INVENTION: YEAST AND FUNGI
 ; FILE REFERENCE: JAB-1667
 ; CURRENT APPLICATION NUMBER: US/10/451,467A
 ; CURRENT FILING DATE: 2003-06-19
 ; PRIOR APPLICATION NUMBER: EP 00870318.3
 ; PRIOR FILING DATE: 2000-12-22
 ; PRIOR APPLICATION NUMBER: EP 01870002.1
 ; PRIOR FILING DATE: 2001-01-04
 ; PRIOR APPLICATION NUMBER: EP 01870003.9
 ; PRIOR FILING DATE: 2001-01-09
 ; NUMBER OF SEQ ID NOS: 732
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 321
 ; LENGTH: 3248
 ; TYPE: DNA
 ; ORGANISM: Saccharomyces cerevisiae
 US-10-451-467A-321
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 Best Local Similarity 100.0%; Pred. No. 2.3e-234;
 Matches 1117; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1832 AAATTTGGTCTCAATCTGGAATAGTCTACTTCGCACTGCTGCTCTTGGATTAATATCC 1891
 Db 1 AAATTTGGTCTCAATCTGGAATAGTCTACTTCGCACTGCTGCTCTTGGATTAATATCC 60

QY 1892 CTGAAGGATACCTTACAAAACCTCTGGTAGGAACCTCTGGTTATAGAAATAACCCCTTTAGCCT 1951
 Db 61 CTGAAGGATACCTTACAAAACCTCTGGTAGGAACCTCTGGTTATAGAAATAACCCCTTTAGCCT 120
 QY 1952 TTTTACGTAATCTGTATACCGTTTAAATTTCCATGTATCTATATAACCTTTTTCACACT 2011
 Db 121 TTTTACGTAATCTGTATACCGTTTAAATTTCCATGTATCTATATAACCTTTTTCACACT 180
 QY 2012 ATATGAATTTCTATCAGGACCGGGCTTTTGTACGGAGAGTGAAAAAATCGAGTTT 2071
 Db 181 ATATGAATTTCTATCAGGACCGGGCTTTTGTACGGAGAGTGAAAAAATCGAGTTT 240
 QY 2072 TGGTGTTTTGGTGAAGAAATTTGGAGGACTATAAAGTACCTATATCTTTTGTATTACGGACT 2131
 Db 241 TGGTGTTTTGGTGAAGAAATTTGGAGGACTATAAAGTACCTATATCTTTTGTATTACGGACT 300
 QY 2132 CAATPAAACAAGTCGTTCTGTCAGTGGTATTGAAGTGTCTAGATCTAAGAGTAGAGAGAG 2191
 Db 301 CAATPAAACAAGTCGTTCTGTCAGTGGTATTGAAGTGTCTAGATCTAAGAGTAGAGAGAG 360
 QY 2192 GTGGCATCTAATAGGTTTTCGACGTTTCTTTTAAAGGTTTATTTGCTCTCCCTAGA 2251
 Db 361 GTGGCATCTAATAGGTTTTCGACGTTTCTTTTAAAGGTTTATTTGCTCTCCCTAGA 420
 QY 2252 ATTTAAGGTCCTAGTATTAGTTTGGTGTGTTTGGGTTACATATTTTCAATTTCAAAAGGA 2311
 Db 421 ATTTAAGGTCCTAGTATTAGTTTGGTGTGTTTGGGTTACATATTTTCAATTTCAAAAGGA 480
 QY 2312 GAATTTAGCTGTCTTTTATATGTCATAGATAACGAGAGCATGCTGCTGCTACTCAT 2371
 Db 481 GAATTTAGCTGTCTTTTATATGTCATAGATAACGAGAGCATGCTGCTGCTACTCAT 540
 QY 2372 CAAGCGATAGGCGATCGCTAGTCAAAAGGNTAAACGAGAGTCTGAAAGTTTGTGCTG 2431
 Db 541 CAAGCGATAGGCGATCGCTAGTCAAAAGGNTAAACGAGAGTCTGAAAGTTTGTGCTG 600
 QY 2432 CACAGTCCCTTGACAATGAAATCCGACGCTAAAAAACCTTAAAAAGATTGTCGATTGGGT 2491
 Db 601 CACAGTCCCTTGACAATGAAATCCGACGCTAAAAAACCTTAAAAAGATTGTCGATTGGGT 660
 QY 2492 CAATGGATTTACTTATTGATCCAGAAATTAGATAAAAAATTCGCTGGGGAATCTAGTGGGA 2551
 Db 661 CAATGGATTTACTTATTGATCCAGAAATTAGATAAAAAATTCGCTGGGGAATCTAGTGGGA 720
 QY 2552 GACGATCATGCTCTGGCAGCAGCATCCAGTCTGCTCAATGCCAAGTGACACACCCACCG 2611
 Db 721 GACGATCATGCTCTGGCAGCAGCATCCAGTCTGCTCAATGCCAAGTGACACACCCACCG 780
 QY 2612 TTAATAACACACGATATAGCGATCCAACTCCGCTAGAGAACTTGCATGGGAGGGTAACT 2671
 Db 781 TTAATAACACACGATATAGCGATCCAACTCCGCTAGAGAACTTGCATGGGAGGGTAACT 840
 QY 2672 CAGGATAGAAATCTCTCAATAAAGACTAAACAAAGTAACTACTTAGGTATATAAAAAAGGTG 2731
 Db 841 CAGGATAGAAATCTCTCAATAAAGACTAAACAAAGTAACTACTTAGGTATATAAAAAAGGTG 900
 QY 2732 TTCACTCTCCATCAGGAAATTAATGCTAAAGTAAAGAAAAAATTTATATGGGTTTC 2791
 Db 901 TTCACTCTCCATCAGGAAATTAATGCTAAAGTAAAGAAAAAATTTATATGGGTTTC 960
 QY 2792 CCGCAATCAACACCCCTAAACGTTAAAGCTGATAATTTCTAGAGCTTGTCAAGATACTT 2851
 Db 961 CCGCAATCAACACCCCTAAACGTTAAAGCTGATAATTTCTAGAGCTTGTCAAGATACTT 1020
 QY 2852 TACAAAATATACAACTAAGCGCAATGGTGAAGATAATGATGGGAATAGCAATGAAATA 2911
 Db 1021 TACAAAATATACAACTAAGCGCAATGGTGAAGATAATGATGGGAATAGCAATGAAATA 1080
 QY 2912 ACGATTTGAGGATAATGGGAGGATAAAGAAATCACA 2948
 Db 1081 ACGATTTGAGGATAATGGGAGGATAAAGAAATCACA 1117

RESULT 3

US-09-864-408A-91
; Sequence 91, Application US/09864408A
; Publication No. US20040009474A1
; GENERAL INFORMATION:
; APPLICANT: Leach, Martin D.
; APPLICANT: Shimkets, Richard A.
; TITLE OF INVENTION: No. US20040009474A1 Human Polynucleotides and Polypeptides Encoded by
; FILE REFERENCE: 21402-012
; CURRENT APPLICATION NUMBER: US/09/864,408A
; PRIOR FILING DATE: 2001-05-24
; PRIOR FILING DATE: 2006-06-90
; PRIOR FILING DATE: 2000-05-24
; NUMBER OF SEQ ID NOS: 9068
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 91
; LENGTH: 177
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-864-408A-91

Query Match 3.7%; Score 108.4; DB 3; Length 177;
Best Local Similarity 99.1%; Pred. No. 1.5e-13;
Matches 109; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2839 GTACAAGATCTTTACAAAATATACAACTAAGCGACAATGGTGAAGATATGATGGGAAT 2898
DB 1 GTACAAGATCTTTACAAAATATACAACTAAGCGACAATGGTGAAGATATGATGGGAAT 60
QY 2899 AGCAATGAAATAACGATATTTAGGATATGGGAGGATAAAGAAATCACA 2948
DB 61 AGCAATGAAATAACGATATTTAGGATATGGGAGGATAAAGAAATCACA 110

RESULT 4

US-10-021-323-451/c
; Sequence 451, Application US/10021323
; Publication No. US20040123340A1
; GENERAL INFORMATION:
; APPLICANT: Deikman, Jill
; APPLICANT: Feng, Paul C.C.
; APPLICANT: Fincher, Karen L.
; APPLICANT: Ziegler, Todd E.
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(52274)B
; CURRENT APPLICATION NUMBER: US/10/021,323
; CURRENT FILING DATE: 2001-12-12
; PRIOR APPLICATION NUMBER: US 60/255, 619
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 17880
; SEQ ID NO 451
; LENGTH: 341
; TYPE: DNA
; ORGANISM: Gossypium hirsutum
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB3825-007-Q1-K6-C8
US-10-021-323-451

Query Match 2.1%; Score 62.2; DB 7; Length 341;
Best Local Similarity 51.2%; Pred. No. 0.0029;
Matches 145; Conservative 0; Mismatches 138; Indels 0; Gaps 0;
QY 679 TTCTCGTTACTTTCTTATAGATATAGATATGATGTTTCTTATAGATGAAGGTAT 738
DB 284 TTTTGTGTTT 225
QY 739 TTATCGGTCCTTTGTGATTCCTATATTAATAAATCTTTTAAATGCAATTTCTGGT 798
DB 224 TTTTGTGTTT 165
QY 799 GCTCTTTGTGCTTCTGATTTTTTTTTTTTTTTTGGACCACTGGATGGAACCTTTGATG 858

DB 164 TTTTGTGTTT 105
QY 859 ATTTTATTACCTTTTATTTAAGTTTACTAAATATCGAGATTTCAGGAACAAACATAGAA 918
DB 104 TTTTGTGTTT 45
QY 919 TTTTCTTTGTCAAGAAAATAAAACGAATAAAATTTGATGCTTT 961
DB 44 AATAATATTT 2

RESULT 5

US-10-021-323-8131
; Sequence 8131, Application US/10021323
; Publication No. US20040123340A1
; GENERAL INFORMATION:
; APPLICANT: Deikman, Jill
; APPLICANT: Feng, Paul C.C.
; APPLICANT: Fincher, Karen L.
; APPLICANT: Ziegler, Todd E.
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(52274)B
; CURRENT APPLICATION NUMBER: US/10/021,323
; CURRENT FILING DATE: 2001-12-12
; PRIOR APPLICATION NUMBER: US 60/255, 619
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 17880
; SEQ ID NO 8131
; LENGTH: 528
; TYPE: DNA
; ORGANISM: Gossypium hirsutum
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB3828-006-Q1-N6-F8
US-10-021-323-8131

Query Match 2.1%; Score 61.8; DB 7; Length 528;
Best Local Similarity 51.6%; Pred. No. 0.0043;
Matches 141; Conservative 0; Mismatches 132; Indels 0; Gaps 0;
QY 679 TTCTCGTTACTTTCTTATAGATATAGATATGATGTTTCTTATAGATGAAGGTAT 738
DB 3 TTTTGTGTTT 62
QY 739 TTATCGGTCCTTTGTGATTCCTATATTAATAAATCTTTTAAATGCAATTTCTGGT 798
DB 63 TTTTGTGTTT 122
QY 799 GCTCTTTGTGCTTCTGATTTTTTTTTTTTTTTTGGACCACTGGATGGAACCTTTGATG 858
DB 123 TTTTGTGTTT 182
QY 859 ATTTTATTACCTTTTATTTTAAAGTTTACTAAATATCGAGATTTTCAAGAACAAACATAGAA 918
DB 183 GGGTTTTTTTTTTTTTTTAAATAAAAAAAAAAAAAAAAAATTTTTTAAAAAAAAAAAAAAAAAG 242
QY 919 TTTTCTTTGTCAAGAAAATAAAACGAATAAAATTTGATGCTTT 951
DB 243 GGTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 275

RESULT 6

US-10-473-126-386/c
; Sequence 386, Application US/10473126
; Publication No. US20040234973A1
; GENERAL INFORMATION:
; APPLICANT: Epigenomics AG
; TITLE OF INVENTION: Methods and nucleic acids for the analysis of hematopoietic cell
; FILE REFERENCE: proliferation disorders
; CURRENT APPLICATION NUMBER: US/10/473,126
; CURRENT FILING DATE: 2003-09-26

```

; NUMBER OF SEQ ID NOS: 1258
; SEQ ID NO 386
; LENGTH: 8056
; TYPE: DNA
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-473-126-386

Query Match      2.1%; Score 61.8; DB 8; Length 8056;
Best Local Similarity 48.0%; Pred. No. 0.016;
Matches 177; Conservative 0; Mismatches 192; Indels 0; Gaps 0;

Qy 585 TAATGATTAATTTGAAACCATCTTGGCGTAGCGAAGATTCATATCCCTATTCCTGTTA 644
Db 2807 TAATAAACAAATTCATTTAAATTTATTAAATAAACAATTAATATATTTTATTTT 2748

Qy 645 GCGAAGTCACAAAATAAAAAACATTTAGAAAAATCTCGTTACTTTTCTTATAGATATA 704
Db 2747 TATTAAATATTTATTAACAATTAATTTTATTAAAAAAAATAATAATTTAAAAA 2688

Qy 705 GATATATGATGTTTGGCTTATAGATGAAGGATTTATTCGGCTCCTTTTGTATTCCTAT 764
Db 2687 AATTTAAAAATTTATTTATTTTAAAAATTTTAAATTTTAAACATTTTATTTTATTTT 2628

Qy 765 ATTAATAAAATCTTTTAAATGCAATTTTCTGGCTCCTTTTGTGCTTCTGTATTTT 824
Db 2627 TTTAAATTTATTTATATTTTATAATTTTATTTTTCATTTATTTTATTTTAAAAAATTT 2568

Qy 825 TTTTTTGGACCTGGATGGAACCTTTGATGATTTTATTACCTTTTATTATTAAGTTAC 884
Db 2567 ATTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTATTTTATTTT 2508

Qy 885 TAAATATCGAATTTTCAGAACAAAAACATAGAATTTTCTTTGTCAAGAAAAATAAAACG 944
Db 2507 ATTAATATTTAAATTTTAAACAAAAATAAAAAATATATAAATAAAAAATAAAAAA 2448

Qy 945 AAATAAAAT 953
Db 2447 AAATTAAT 2439

RESULT 7
US-10-312-841-2/c
; Sequence 2, Application US/10312841
; Publication No. US20030186277A1
; GENERAL INFORMATION:
; APPLICANT: Epigenomics AG
; TITLE OF INVENTION: Diagnose von bedeutenden genetischen Parametern innerhalb des MHC
; FILE REFERENCE: E01/1208/WO
; CURRENT APPLICATION NUMBER: US/10/312,841
; CURRENT FILING DATE: 2002-12-30
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 2
; LENGTH: 367378
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
; NAME/KEY: unsure
; LOCATION: (379615)
US-10-312-841-2

Query Match      2.1%; Score 61.6; DB 6; Length 367378;
Best Local Similarity 49.5%; Pred. No. 0.34;
Matches 186; Conservative 0; Mismatches 189; Indels 1; Gaps 1;

Qy 660 AAAAAACATTAGAAAAATTCCTGTTACTTTTCTTATAGATATAGATATATGTTATGTT 719
Db 3242816 AATAAAATTCCTTACTAACTCATATATTTACCATACATTTTAAAAAATTTCTAACAT 3242757

Qy 720 TCGTTATAGATGAAGGATTTATTCGGTCTTTGTATTCCTTATTTTAAATAATTCCT 778

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Db 3242756 TTCTAAATCATATTATATAAATAATATATTTTAAATCATATTTTAAACAAATCT 3242697
Qy 779 TTTAAATGCAATTTTCTGGTGCTCTTTTGTGCTCTCTGTAATTTTCTTTTGGACCA 838
Db 3242696 ATAAAAACATACATTTTAAAAACTATTAATTTTCTTTTCTTTTCTTTTCTTTT 3242637
Qy 839 TGGATGGAACACCTTTGATGATTTTATTTACCTTTTATTTTAAAGTTACTAAAAATTCGAGAT 898
Db 3242636 AAAAATAAATACTTTTATCTATTTAAACCACTTTTCTTTTATACATATATAACAATTA 3242577
Qy 899 TTCAAGAACAAAAACATAGAATTTTCTTTGTCAAGAAAAATAAAACGAAATAAATTTGATGC 958
Db 3242576 TTTAAAAACAAATTTAATACCCTTTTTATCAAAATTTTAAAAATTTAATAATAATTAACC 3242517
Qy 959 TTTGACTACTGACTGCTGTCATAGAGAACGACGACGACGACGACGACGACGACGACGAC 1018
Db 3242516 TAAATAACAAATTTTAAAAATATTTCAATTTAAACAAAACAAACTCTTCGACTATTTTCTAAA 3242457
Qy 1019 TTTCTAGTGTCTCTAT 1034
Db 3242456 TTTCACTTATCTTTT 3242441

RESULT 8
US-10-312-841-1
; Sequence 1, Application US/10312841
; Publication No. US20030186277A1
; GENERAL INFORMATION:
; APPLICANT: Epigenomics AG
; TITLE OF INVENTION: Diagnose von bedeutenden genetischen Parametern innerhalb des MHC
; FILE REFERENCE: E01/1208/WO
; CURRENT APPLICATION NUMBER: US/10/312,841
; CURRENT FILING DATE: 2002-12-30
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 1
; LENGTH: 3673778
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
; NAME/KEY: unsure
; LOCATION: (3294164)
US-10-312-841-1

Query Match      2.1%; Score 61.2; DB 6; Length 3673778;
Best Local Similarity 50.3%; Pred. No. 0.42;
Matches 150; Conservative 0; Mismatches 148; Indels 0; Gaps 0;

Qy 669 TTAGAAAAATTCCTGTTACTTTTCTTATAGATATAGATATATGTTGTTGCTTATAG 728
Db 167656 TTTTAAATTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT 167715
Qy 729 ATGAAGGTATTTATCGCGTCTTTGTTATTCCTATTTATTAATAAAATCTTTTAAAAATGC 788
Db 167716 TTTTGTGTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT 167775
Qy 789 ATTTCTGGTGCTCTTTGTTGCTCTGTAATTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTT 848
Db 167776 TTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTT 167835
Qy 849 ACCTTTGATGATTTTATACCTTTTATTTAAAGTTACTAAAAATATCGAGATTCAGGAACA 908
Db 167836 ATATAAAATAATTTTATGTTGATTCGGTTGTAAGTAAGTATTTTGTGAATTTATATGTTAA 167895
Qy 909 AAACATAGAATTTCTTTGTCAAGAAAAATAAAACGAAATAAATTTGATGCTTTGACTA 966
Db 167896 AAGTATATGTTTCTTTTATATGAGAAATAAGTAATAATAGGAAGTATTAATAAGATA 167953

RESULT 9
US-10-021-323-7699/c

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; Sequence 7699, Application US/10021323
; Publication No. US20040123340A1
; GENERAL INFORMATION:
; APPLICANT: Deikman, Jill
; APPLICANT: Feng, Paul C.C.
; APPLICANT: Pincher, Karen L.
; APPLICANT: Ziegler, Todd E.
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE OF INVENTION: Plants
; FILE REFERENCE: 38-21(52274)B
; CURRENT APPLICATION NUMBER: US/10/021,323
; CURRENT FILING DATE: 2001-12-12
; PRIOR APPLICATION NUMBER: US 60/255, 619
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 17880
; SEQ ID NO 7699
; LENGTH: 520
; TYPE: DNA
; ORGANISM: Gossypium hirsutum
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB3828-019-Q1-N6-D6
US_10-021-323-7699

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Query Match	2.1%	Score 61	DB 7	Length 520
Best Local Similarity	50.5%	Pred. No. 0.0064		
Matches 148	Conservative 0	Mismatches 145	Indels 0	Gaps 0
Qy	659	TAAAAAACATATGAAAAAAATTCGTTACCTTTCTTATAGATATAGATATATGATCGT	718	
Db	393	TCAAAAAAAATAATATTTTTTTTTTTTTTTTTTTTTTAAATAATATTTTTTTTTTTTTTT	334	
Qy	719	TTGCTTATAGTGAAGGTATTTATCGGGTCCTTTGTATTCCTATTATTAATAAATCT	778	
Db	333	TTTTTTTTTAAATAAAATATTTAAAAATTTTTTATTTTTTATCTCTTTTTTTTTTTTT	274	
Qy	779	TTTAAAAATGCAATTTTCGGTGCTCTTTTGTTGCTCTCTATTTTTTTTTTTTGGACCC	838	
Db	273	TTTAAAAATACCTTTTTTTTTTTTTTTTTTTTTTCTTTTTTAAAAATTTTACCTTTTTTT	214	
Qy	839	TGGATGGAACACCTTGTGATGATTTATATACCTTTATTTTAGTTACTTAAATATATCGAG	898	
Db	213	TTTTTTTAAATTTTTTTTATTTTTTTTTTTTTTATTTAAATAAAAAAAAATAAATTAAT	154	
Qy	899	TTCAGGAACAAACATGAAATTTTCTTTGTCAAGAAAAATAAAAACGAAATAAA	951	
Db	153	AA	101	

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RESULT 10
US-10-198-846-1369/c
; Sequence 1369, Application US/10198846
; Publication No. US20030099974A1
; GENERAL INFORMATION:
; APPLICANT: Lillie, James
; APPLICANT: Xu, Yongyao
; APPLICANT: Wang, Youzhen
; APPLICANT: Steimmann, Kathleen
; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS
; TITLE OF INVENTION: FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
; TITLE OF INVENTION: THERAPY OF BREAST CANCER
; FILE REFERENCE: MRI-049
; CURRENT APPLICATION NUMBER: US/10198,846
; CURRENT FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/306,220
; PRIOR FILING DATE: 2001-07-18
; NUMBER OF SEQ ID NOS: 14084
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1369
; LENGTH: 539
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature

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;	LOCATION: 2, 3, 4, 8, 14, 25, 113, 117, 118, 121, 123, 125, 127, 129,	
;	LOCATION: 130, 134, 135, 142, 145, 152, 155, 156, 164, 167, 169, 189,	
;	LOCATION: 190, 201, 202, 211, 238, 239, 270, 271, 292, 295, 302, 303,	
;	LOCATION: 306, 314, 315, 321, 339, 346, 349, 359, 374, 388, 395	
;	OTHER INFORMATION: n = A,T,C or G	
;	FEATURES:	
;	NAME/KEY: misc.feature	
;	LOCATION: 396, 410, 414, 430, 432, 435, 439, 440, 442, 443, 447, 448,	
;	LOCATION: 453, 473, 476, 480, 482, 486, 487, 493, 495, 500, 501, 510,	
;	LOCATION: 530	
;	OTHER INFORMATION: n = A,T,C or G	
;	US-10-198-846-1369	
	Query Match	2.1%; Score 60.6; DB 5; Length 539;
	Best Local Similarity	45.6%; Pred. No. 0.008;
	Matches 152; Conservative	0; Mismatches 180; Indels 1; Gaps 1;
Qy	619 GAAGATTGATATCCCTATTTCTGTTAGGCAAGTCACAAAATAAAAAACATTAGAAAAA	678
Db	426 GGAATTTTATNCTNTTTTTTGGAAAAGNNTTTCGNTTTTTTTAAATTTTNAAAAAATA	367
Qy	679 TTCGCGTACCTTTCTTATAGATATAGATATATGATCGTTGCTTATAGATGAAGGTAT	738
Db	366 TTTTAAANAATTTTAAAGNCANCTTTTNAATTTGT-ITTTTTTTTTTATTAANNTTTTT	308
Qy	739 TTATCGGCGCTTTGTGATTCCTTATTAATAAAATCTTTTAAATGCATTTTCTGCT	798
Db	307 TNATNNAATTCANNTNTTTTTTTTTTTTTTTTTTTTTTTTANNTTTTTTATTAATTTTTT	248
Qy	799 GCTCTTTGTGCTCTGTAATTTTTTTTTTTTTTTTGGACCACATCGATGGGAAACCTTTGATG	858
Db	247 TTTTTTTNNNTTTTTTTTTTTTTTATTTTTTTTTTANTTTTTTTTTTNNAAATTTTTTTNN	188
Qy	859 ATTTTATTAACCTTTATTTTAAAGTTACTAAAAATATCGAGATTTCCGGAACAAACATAGAA	918
Db	187 TTTTTTTTTTTTTTTTTTTTNNANTTTTTTTTTTNNNTTNTTCCCTTNAATTTAANNAANA	128
Qy	919 TTTTCTTTGTCAAGAAAAATAAAACGAAATAAA	951
Db	127 NTNANTNAANNAANNAANNAANNAANNAANNAANNAANNAANNAANNAANNAANNA	95

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RESULT 11
US-09-814-353-4739
; Sequence 4739, Application US/09814353
; Publication No. US20030165831A1
; GENERAL INFORMATION:
; APPLICANT: Lee, John
; APPLICANT: Thompson, Pamela
; APPLICANT: Lillie, James
; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
; TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND
; TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
; FILE REFERENCE: MRI-006B
; CURRENT APPLICATION NUMBER: US/09/814,353
; PRIORITY FILING DATE: 2001-03-21
; PRIORITY FILING DATE: 2000-03-21
; PRIORITY FILING DATE: 2000-03-21
; PRIORITY FILING DATE: 2000-05-25
; PRIORITY FILING DATE: 2000-06-15
; PRIORITY FILING DATE: 2000-07-07
; PRIORITY FILING DATE: 2000-07-25
; PRIORITY FILING DATE: 2000-12-21
; NUMBER OF SEQ ID NOS: 22037
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4739
; LENGTH: 664
; TYPE: DNA

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; NUMBER OF SEQ ID NOS: 22037
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11036
; LENGTH: 664
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 53, 54, 159, 161, 174, 177, 178, 180, 182, 185, 212, 215,
; LOCATION: 216, 219, 220, 226, 237, 247, 248, 265, 269, 278, 281, 283,
; LOCATION: 289, 294, 298, 299, 300, 301, 302, 304, 305, 307, 308, 316,
; LOCATION: 327, 333, 334, 335, 336, 339, 343, 344, 345, 348, 368
; OTHER INFORMATION: n = A,T,C or G
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 573, 575, 578, 584, 600, 601, 603, 606, 607, 616, 623, 625,
; LOCATION: 626, 642
; OTHER INFORMATION: n = A,T,C or G
; US-09-814-353-11036
Query Match          2.0%; Score 60.4; DB 3; Length 664;
Best Local Similarity 49.8%; Pred. No. 0.0098;
Matches 121; Conservative 0; Mismatches 122; Indels 0; Gaps 0
QY 711 TGTATGGTTGCTTAGATAGAAAGGATATTATACCGTCCTTTGTATCCCTATTATTAAAT 770
Db 30 TTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTT 89
QY 771 AAAATTCCTTTAAATGCATTTTCGTGCTCTTTTGTGCTTCCTGATATTTTATTTT 830
Db 90 TTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTT 149
QY 831 TGGACCACTGGATGGAAACCTTTTGATGATTTTATTACCTTTATTTTAAGTTACTAAAT 890
Db 150 GGGGGGGGNNAAAAAANAAAAAANANNANTNATNTTTTTTTTTTAAAAAANAAAAA 209
QY 891 ATCGAGATTTTCAGGAACAAACATAGAAATTTCTTTGTCAAGAAAAATAAACGAAATAA 950
Db 210 AANAANNATNNAAGANAAAAACAAAAANATTTTTTTTTNNAAAAAATAAGAAAAANRGA 269
QY 951 ATT 953
Db 270 ATT 272
RESULT 13
US-09-814-353-17420
; Sequence 17420, Application US/09814353
; Publication No. US20030165831A1
; GENERAL INFORMATION:
; APPLICANT: Lee, John
; APPLICANT: Thompson, Pamela
; APPLICANT: Lillie, James
; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
; TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND
; TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
; FILE REFERENCE: MRI-006B
; CURRENT APPLICATION NUMBER: US/09/814,353
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: US 60/191,031
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: US 60/207,124
; PRIOR FILING DATE: 2000-05-25
; PRIOR APPLICATION NUMBER: US 60/211,940
; PRIOR FILING DATE: 2000-06-15
; PRIOR APPLICATION NUMBER: US 60/216,820

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Db 303 AA 304

Search completed: December 9, 2005, 02:55:09
Job time : 2359.24 secs

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model
Run on: December 8, 2005, 16:30:04 ; Search time 511.407 Seconds
(without alignments)
10246.741 Million cell updates/sec

Title: US-09-165-460A-3
Perfect score: 2948
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Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA:*

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- 2: /cgn2_6/ptodata/1/ina/5 COMB seq:*
- 3: /cgn2_6/ptodata/1/ina/6A COMB seq:*
- 4: /cgn2_6/ptodata/1/ina/6B COMB seq:*
- 5: /cgn2_6/ptodata/1/ina/H COMB seq:*
- 6: /cgn2_6/ptodata/1/ina/pCTUS COMB seq:*
- 7: /cgn2_6/ptodata/1/ina/pp COMB seq:*
- 8: /cgn2_6/ptodata/1/ina/RE COMB seq:*
- 9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2711.2	92.0	2850	US-09-184-964-2	Sequence 2, Appli
2	61.6	2.1	1141	US-09-806-708B-22	Sequence 22, Appli
3	54.4	1.8	1141	US-09-806-708B-22	Sequence 22, Appli
4	53.6	1.8	6265	US-09-129-112-3	Sequence 3, Appli
5	52.8	1.8	50000	US-09-662-254B-25	Sequence 25, Appli
6	52.6	1.8	396	US-09-640-173-53	Sequence 53, Appli
7	52.6	1.8	396	US-09-713-550-53	Sequence 53, Appli
8	52.6	1.8	396	US-09-825-294-53	Sequence 53, Appli
9	52.6	1.8	396	US-09-970-966-53	Sequence 53, Appli
10	52.2	1.8	1039	US-09-902-540-1280	Sequence 1280, Ap
11	51.8	1.8	96922	US-09-949-016-17061	Sequence 17061, A
12	51.4	1.7	1830	US-09-662-254B-27	Sequence 27, Appli
13	51.4	1.7	32392	US-09-662-254B-23	Sequence 23, Appli
14	51.4	1.7	50000	US-09-662-254B-23	Sequence 23, Appli
15	50.4	1.7	580073	US-08-545-528D-1	Sequence 1, Appli
16	49.8	1.7	612	US-09-949-016-12896	Sequence 12896, A
17	49	1.7	451924	US-09-949-016-1357	Sequence 1357, Ap
18	49	1.7	451925	US-09-949-016-17305	Sequence 17305, A
19	48.2	1.6	6243	US-09-056-075-1	Sequence 1, Appli
20	48.2	1.6	53332	US-09-801-861-3	Sequence 3, Appli
21	48.2	1.6	53332	US-10-224-562-3	Sequence 3, Appli
22	48.2	1.6	53332	US-10-786-065-3	Sequence 3, Appli
23	48.2	1.6	1664976	US-08-916-421B-1	Sequence 1, Appli
24	48.2	1.6	1664976	US-09-692-570-1	Sequence 1, Appli

Sequence 13, Appli
Sequence 33, Appli
Sequence 1, Appli
Sequence 7, Appli
Sequence 2813, Ap
Sequence 14, Appli
Sequence 13248, A
Sequence 24, Appli
Sequence 27, Appli
Sequence 16445, A
Sequence 2, Appli
Sequence 12298, A
Sequence 15316, A
Sequence 13173, A
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Sequence 51987, A
Sequence 191305, A
Sequence 17216, A
Sequence 33, Appli
Sequence 196365, A
Sequence 1038, Ap

ALIGNMENTS

RESULT 1
US-09-184-964-2
; Sequence 2, Application US/09184964
; Patent No. 6391574
; GENERAL INFORMATION:
; APPLICANT: Rine, Jasper D.
; APPLICANT: Boyartchuk, Victor L.
; APPLICANT: Ashby, Matthew N.
; TITLE OF INVENTION: AFC1 AND RC61: ISOPRENLYLATED CAAX
; TITLE OF INVENTION: PROCESSING ENZYMES
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill road, suite 100
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/184,964
; FILING DATE: 03-NOV-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/902,774
; FILING DATE: 30-JUL-1997
; APPLICATION NUMBER: 60/023,491
; FILING DATE: 07-AUG-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Suyat, Reginald J.
; REGISTRATION NUMBER: 28,172
; REFERENCE/DOCKET NUMBER: 09272-006004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/322-5070
; TELEFAX: 650/854-0875
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2850 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: Genomic DNA
US-09-184-964-2

Query Match 92.0%; Score 2711.2; DB 3; Length 2850;									
Best Local Similarity 96.4%; Pred. No. 0;									
Matches 2845; Conservative 0; Mismatches 3; Indels 102; Gaps 3;									
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DB	121	ATATATATATGAATAGGGAGAGCGTAGGCAAGGAACCTGAAATTTTACAGATTTTATATAC	180						
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DB	181	TTCAACAGCTGTTTAAACGATATCGAAAGCATTTGCAACTTTGAAAGTTAGTGTTCACAACTT	240						
QY	241	ATCCAACTTTTAAAAACAGGTGATGACCTTAAACAAACACTCAAGACGCAATATTC	300						
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DB	301	TGAGGATTCAAATATCGCACACAGGTAAACGTAAGTTCATCGTCCCGAGTTTCAGCGTCATT	360						
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DB	601	AAACCATCTTTGGCGTAGCGAAGATTCGATATCCCTATTTCTGTTAGGCAAGTGACAAATA	660						
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DB	841	GATGGAACCTTTGATGATTTTATTTACCTTTTATTTTAACTTACTTAAATATCGAGATTT	900						
QY	901	CAGGAAACAAACATAGAAATTTTCTTCTGCAAGAAAAATAAAGGAAATAAATTTGATGCTT	960						
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	1991	CTTTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG	2050						
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RESULT 2
US-09-806-708B-22/c
; Sequence 22, Application US/09806708B
; Patent No. 6784342
; GENERAL INFORMATION:
; APPLICANT: The University of British Columbia
; TITLE OF INVENTION: Regulation of Embryonic Transcription in Plants
; FILE REFERENCE: 4810-58741
; CURRENT APPLICATION NUMBER: US/09/806,708B
; PRIORITY FILING DATE: 2001-04-03
; PRIOR FILING DATE: 1999-08-04
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.0

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; SEQ ID NO 22
; LENGTH: 1141
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; NAME/KEY: promoter
; LOCATION: (1)..(1141)
; OTHER INFORMATION: consensus sequence of A.t., L.a., and B.n. FAE1 promoters
US-09-806-708B-22

Query Match      2.1%; Score 61.6; DB 3; Length 1141;
Best Local Similarity 11.0%; Pred. No. 0.00011;
Matches 109; Conservative 356; Mismatches 521; Indels 4; Gaps 1;

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Qy 487 AGACATTAATGTGAACCTTGAATTTAATAAGCAATTAAGGAAACTTTTAAATTCCAAAGTTT 546
Db 1023 WCAWRNNNMWCATNGYAKSCATNNAMWYATTRWAAAYAAAKWARWAGNNMRMYGAAAGNKW 964
Qy 547 TGAAGTCGCTATGTTGTAGGTTTATTCGGTTCGAGTAATGATTAATTTGAAACCA 606
Db 963 GCMAAMATMGBWADTAGKMCNNNNNNWTTDVRERMAKAKNNNNNNAYWTACYNRAATNN 904
Qy 607 TCTTGGCGTAGCAGAGATTGATATCCCTATTTCTGTTAGGCAAGTGACAAATAAAAAA 666
Db 903 KMATHMKNWTHGASHKRTTHHTTCRTKYNNNNNNNARTVYWHHAARRMNNAWWTXTN 844
Qy 667 CATTAGAAAAAATCTCGTTACTCTTTCTATAGATATAGATATATGATGTTGTTGCTTAT 726
Db 843 NNNNNNNNACRNTTWWABKHSHWCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN 784
Qy 727 AGATGAAGGTTATTTATCGCGTCTTGTGATTCCTATTAATTAATAAATAATTTTAAAT 786
Db 783 AARMARTCNMYHAAVTTTHTDWCYKTMNTWYDMWMTTMBTTTTTTRNTMTSTNNNNNN 724
Qy 787 GCATTTTCTGCTGCTTCTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 846
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Qy 1027 GCTCCTATACATCTCCATATCTGCTACCGCTATATGCAACTTCAACACCAAGAGG 1086
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Qy 1087 GTCTAAACGAGATAATCTCGAACGATTAATAATCTCGCATGCAAAACCTTCAATATGCT 1146
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Qy 1147 AATTTCCAACTTTTGTGCTTTTACAAATCTCAATATCTCAATATCTAGTACCACTTCA 1206
Db 367 HWYTVDTVMRAWNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN 308
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 Db 127 RYDYWCAMCWMNAKAKVRITAMKHMYITDR 98

RESULT 3
 US-09-806-708B-22
 ; Sequence 22, Application US/09806708B
 ; Patent No. 6784342
 ; GENERAL INFORMATION:
 ; APPLICANT: The University of British Columbia
 ; TITLE OF INVENTION: Regulation of Embryonic Transcription in Plants
 ; FILE REFERENCE: 4810-58741
 ; CURRENT APPLICATION NUMBER: US/09/806,708B
 ; CURRENT FILING DATE: 2001-04-03
 ; PRIOR APPLICATION NUMBER: US 60/147,133
 ; PRIOR FILING DATE: 1999-08-04
 ; NUMBER OF SEQ ID NOS: 23
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 22
 ; LENGTH: 1141
 ; TYPE: DNA
 ; ORGANISM: Artificial sequence
 ; FEATURE:
 ; NAME/KEY: promoter
 ; LOCATION: (1)..(1141)
 ; OTHER INFORMATION: consensus sequence of A.t., L.a., and B.n. PAB1 promoters
 US-09-806-708B-22

Query Match 1.8%; Score 54.4; DB 3; Length 1141;
 Best Local Similarity 11.9%; Pred. No. 0.0055;
 Matches 121; Conservative 363; Mismatches 528; Indels 7; Gaps 3;

QY 396 TTTTACCTAGCGTAGCTCTACTCTCCCTGAAATTTACAGACAGATGTTCAATAAT 455
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 QY 456 GGGTGTAGGATTCCTTTACAGTACAAACAGACATTAATGAACTTGGAAATTTAAATA 515
 Db 118 WGTGWRHRYWRWAMBDTVDHRYVYTAANNANTMCMDDKDRTRWKKNNNATGWDD 177
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 QY 573 ATTGCGTTCGAGTAATGATTAATTTGAAACCATCTTGCGGTAGCGAAGATTGATATCC 632
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 QY 633 CTATTTCTGTAGCAAGTACAAAAATAAAAAACATTAGAAAAATTCCTGTTACTTTT 692
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 QY 693 CTTATAGATATAGATATATGATGTTTGTCTTATAGATGAAGTATTTATCGGTCCTTT 752
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 Db 418 DMWBGTNNNNNGRTYGYGWTGKMKWYTKWANNCKWRAMDHKTCCTHNTTWWKMT 477
 QY 813 TCTGATTTTCTTTTTCGACCACTGGAGTGAACCTTTGATGATTTTATTACCTTT 872
 Db 478 YWNNCYKWSMTNGKSHBAALAYITWYWWRRYAHANNNDWYWKACTWYKVBVCSKW 537
 QY 873 ATTTTAAAGTTACTAAAAATATCAGATTTTCAGGACAAAAACATAGAATTTTCTTGCAAG 932
 Db 538 NYAAAWTKSSWNTSRYYRWKTNNSWRSDTRSMGRANNYARABHYGKWNTRWBWS 597

QY 933 AAAAATAAAGCAAAATAATTTGATGCTTTTGGACTACTGCTGTCTGTATGAGAGAACCA 992
 Db 598 HTWBHBRAGAAYHMYBMYBAKCHMKAWYKAKYAGA-GGSNNNNNNNNNNNNNNNNAT 656
 QY 993 GAACAGCAATGCTCAAAATTTCTCAACATTTCTAGTGCTCTTATACATCTCCATATCTATG 1052
 Db 657 CARDDYAAASRWYAMANAAYKYYKBAANAYYTHANNWGWGNWNNATDTRRTWKNNNNN 716
 QY 1053 TGCTACCGCTATATGCAAACTTCAACACCAAGAGGCTCTAAAGAGATTAATCTCTCAACGA 1112
 Db 717 AGTWKNNNNNNNAKASAAKAYAAAVKAAKHWKAWKMGWADAAABTTDKRNNGA 776
 QY 1113 TTAAATCTCGCATGCAAAAACCTTACAATTAATGCTAAATTTCCAAACCTTTTGGTGCCTT 1172
 Db 777 YKYTTNNNNNTYRGVNTTAARDGWANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN 836
 QY 1173 TTTTCAATCTCAATTAATCTAGTACCACTTCAATATAGTTTCAAGGACGCAATTTTAG 1232
 Db 837 NNNNNNNNAYAWTNKYVYTTDDRWBRBAYTNNNNNNNNNNNNNNNNNNNNNNNNNNNN 896
 QY 1233 GCTTAGGTATTATCCAGGTTTATTAGCTGCAATTCGCAACCCCTTGGCAATTCAGCCAGT 1292
 Db 897 KWDATKMNNAITYNRGTAWRTNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN 956
 QY 1293 TCGTGAAGACCTTAACGAAATGCTGTCGATGCTTATGACCTTATATGTCGACCGCTTT 1352
 Db 957 TKTTCGWNCTTTCRKYNNCTTYTWTMTTNTTWTATRWKINNA---TGSMTNCTATG 1013
 QY 1353 TAGATTTTGTATATATATCATTTTAAATCCAAAGAGCTCTATACATGGAAGATTTTAC 1411
 Db 1014 WKNNNYWTGKTRWTAYRMAITERMKAWKVMATGSMNTINSYARWAYKTRAYKGYWYNAC 1072

RESULT 4
 US-09-129-112-3
 ; Sequence 3, Application US/09129112
 ; Patent No. 6465716
 ; GENERAL INFORMATION:
 ; APPLICANT: Etzler, Marilyn E.
 ; APPLICANT: Murphy, Judith B.
 ; APPLICANT: The Regents of the University of California
 ; TITLE OF INVENTION: A No. 6465716 Factor Binding Protein From Legume Roots
 ; FILE REFERENCE: 023070-079810US
 ; CURRENT APPLICATION NUMBER: US/09/129,112
 ; CURRENT FILING DATE: 1998-08-04
 ; PRIOR APPLICATION NUMBER: US 08/907,226
 ; PRIOR FILING DATE: 1997-08-06
 ; NUMBER OF SEQ ID NOS: 19
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 3
 ; LENGTH: 6265
 ; TYPE: DNA
 ; ORGANISM: Dolichos biflorus
 ; FEATURE:
 ; OTHER INFORMATION: genomic sequence of NBP46 (DB46)
 ; NAME/KEY: exon
 ; LOCATION: (633)..(944)
 ; NAME/KEY: intron
 ; LOCATION: (945)..(1022)
 ; NAME/KEY: exon
 ; LOCATION: (1023)..(1151)
 ; NAME/KEY: intron
 ; LOCATION: (1152)..(1559)
 ; NAME/KEY: exon
 ; LOCATION: (1560)..(1616)
 ; NAME/KEY: intron
 ; LOCATION: (1617)..(1697)
 ; NAME/KEY: exon
 ; LOCATION: (1698)..(1790)
 US-09-129-112-3

Query Match 1.8%; Score 53.6; DB 3; Length 6265;


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? TITLE OF INVENTION: Materials and Methods for Delivery and Expression of Nucleic Acids
?
? TITLE OF INVENTION: Vertebrate Cells
?
? FILE REFERENCE: UF-221C1XC1
?
? CURRENT APPLICATION NUMBER: US/09/662,254B
?
? CURRENT FILING DATE: 2000-09-14
?
? PRIOR APPLICATION NUMBER: 09/086,651
?
? PRIOR FILING DATE: 1998-05-29
?
? PRIOR APPLICATION NUMBER: 60/224,479
?
? PRIOR FILING DATE: 2000-08-10
?
? NUMBER OF SEQ ID NOS: 80
?
? SOFTWARE: PatentIn version 3.1
?
? SEQ ID NO 25
?
? LENGTH: 50000
?
? TYPE: DNA
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? ORGANISM: Amsacta moorei entomopoxvirus
?
? US-09-662-254B-25

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Db     232 TTNTTTTNCCTTTNTTTTAATTCANAAAAGANAAGA   270  
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RESULT 7
US-09-713-550-53
; Sequence 53, Application US/09713550
; Patent No. 6617109
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Stolk, John A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
; TREATMENT OF OVARIAN CANCER
; FILE REFERENCE: 210121.484C4
; CURRENT APPLICATION NUMBER: US/09/713,550
; CURRENT FILING DATE: 2000-11-14
; NUMBER OF SEQ ID NOS: 205
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 53
; LENGTH: 396
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:

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; NAME/KEY: misc.feature
; LOCATION: (1)...(396)
; OTHER INFORMATION: n = A,T,C or G
US-09-713-550-53

Query Match      1.8%; Score 52.6; DB 3; Length 396;
Best Local Similarity 51.1%; Pred. No. 0.011;
Matches 112; Conservative 0; Mismatches 107; Indels 0; Gaps 0;

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QY 739 TTATCGGTCCTTTGTTATCCCTATTAATAAATAATCTTTTAAATGCAATTTCTGGT 798
Db 112 TTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT 171

QY 799 GCTCTTTTGTCTGCTCTGTTATTTTCTTTTGGACCACTGATGGAACCTTTTGATG 858
Db 172 TTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT 231

QY 859 ATTTTATTACCTTTTATTTTAAAGTTACTAAATATCGAGA 897
Db 172 TTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT 231

QY 859 ATTTTATTACCTTTTATTTTAAAGTTACTAAATATCGAGA 897
Db 232 TTNTTTTNCCTTTTNTTTTAAATTCANAAAAAGANAAGA 270

RESULT 8
US-09-825-294-53
; Sequence 53, Application US/09825294
; Patent No. 6710170
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Stolk, John A.
; APPLICANT: Fling, Steven P.
; TITLE OF INVENTION: THERAPY AND DIAGNOSIS OF OVARIAN CANCER
; FILE REFERENCE: 210121.484C5
; CURRENT APPLICATION NUMBER: US/09/825,294
; CURRENT FILING DATE: 2001-04-03
; NUMBER OF SEQ ID NOS: 215
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 53
; LENGTH: 396
; TYPE: DNA
; ORGANISM: Homo sapien
; NAME/KEY: misc.feature
; LOCATION: 224, 225, 228, 235, 240, 246, 257, 266, 274, 279, 281, 282,
; LOCATION: 283, 285, 287, 288, 290, 291, 292, 293, 294, 295, 296, 297,
; LOCATION: 300, 301, 303, 307, 311, 313, 314, 317, 318, 319, 320, 321,
; LOCATION: 323, 324, 328, 329, 330, 336, 337, 338, 339, 340, 341
; OTHER INFORMATION: n = A,T,C or G
; NAME/KEY: misc.feature
; LOCATION: 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 356,
; LOCATION: 357, 358, 359, 362, 363, 364, 365, 366, 367, 373, 380, 381,
; LOCATION: 382, 385, 387, 388, 389, 390, 392
; OTHER INFORMATION: n = A,T,C or G
US-09-825-294-53

Query Match      1.8%; Score 52.6; DB 3; Length 396;
Best Local Similarity 51.1%; Pred. No. 0.011;
Matches 112; Conservative 0; Mismatches 107; Indels 0; Gaps 0;

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Db 52 TTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT 111

QY 739 TTATCGGTCCTTTGTTATCCCTATTAATAAATAATCTTTTAAATGCAATTTCTGGT 798
Db 112 TTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT 171

QY 799 GCTCTTTTGTCTGCTATTTTCTTTTGGACCACTGATGGAACCTTTTGATG 858
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QY 859 ATTTTATTACCTTTTATTTTAAAGTTACTAAATATCGAGA 897
Db 232 TTNTTTTNCCTTTTNTTTTAAATTCANAAAAAGANAAGA 270
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RESULT 9
US-09-970-966-53
; Sequence 53, Application US/09970966
; Patent No. 6720146
; GENERAL INFORMATION:
; APPLICANT: Stolk, John A.
; APPLICANT: Molesch, David Alan
; APPLICANT: Fling, Steven P.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; FILE REFERENCE: 210121.484C6
; CURRENT APPLICATION NUMBER: US/09/970,966
; CURRENT FILING DATE: 2001-10-02
; NUMBER OF SEQ ID NOS: 215
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 53
; LENGTH: 396
; TYPE: DNA
; ORGANISM: Homo sapiens
; NAME/KEY: misc.feature
; LOCATION: 224, 225, 228, 235, 240, 246, 257, 266, 274, 279, 281, 282,
; LOCATION: 283, 285, 287, 288, 290, 291, 292, 293, 294, 295, 296, 297,
; LOCATION: 300, 301, 303, 307, 311, 313, 314, 317, 318, 319, 320, 321,
; LOCATION: 323, 324, 328, 329, 330, 336, 337, 338, 339, 340, 341
; OTHER INFORMATION: n = A,T,C or G
; NAME/KEY: misc.feature
; LOCATION: 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 356,
; LOCATION: 357, 358, 359, 362, 363, 364, 365, 366, 367, 373, 380, 381,
; LOCATION: 382, 385, 387, 388, 389, 390, 392
; OTHER INFORMATION: n = A,T,C or G
US-09-970-966-53

Query Match      1.8%; Score 52.6; DB 3; Length 396;
Best Local Similarity 51.1%; Pred. No. 0.011;
Matches 112; Conservative 0; Mismatches 107; Indels 0; Gaps 0;

QY 679 TTCTCGTACTTTCTTATAGATATAGATATATGTTGCTTATAGATGAAGGTAT 738
Db 52 TTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT 111

QY 739 TTATCGGTCCTTTGTTATCCCTATTAATAAATAATCTTTTAAATGCAATTTCTGGT 798
Db 112 TTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT 171

QY 799 GCTCTTTTGTCTGCTATTTTCTTTTGGACCACTGATGGAACCTTTTGATG 858
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QY 859 ATTTTATTACCTTTTATTTTAAAGTTACTAAATATCGAGA 897
Db 232 TTTNTTTTNCCTTTTNTTTTAAATTCANAAAAAGANAAGA 270

RESULT 10
US-09-902-540-1280/c
; Sequence 1280, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 1280
; LENGTH: 1039
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Db 1401 TTTAAATATTTGACGATGCTATAGAAATATGTAATAATAAAACCTTATTTTAAATTTTAA 1460
Qy 820 TTTTCTTTTGTGGACCACTGGATGAAACCTTTTCATGATTTTATTAACCTTTATTTTAA 879
Db 1461 TAATATTAATGTAGAAATAATTTTAAACAAATATATTTAATAATAATAAAATAAA 1520
Qy 880 GTTACTAAATATCGAGATTTTCAGGAACAAACATAGAAATTTTCTTTGTCAAGAAAAATA 939
Db 1521 CATAAATACAAATCATGATTTTCATAACAGCATTTATACATATATAATTTGTAATAATAAAA 1580
Qy 940 AAACGAAATAAAT 952
Db 1581 TTGTTATATACAT 1593

RESULT 13

US-09-662-254B-27/c

; Sequence 27, Application US/09662254B

; Patent No. 6933145

; GENERAL INFORMATION:

; APPLICANT: Moyer, Richard W.

; APPLICANT: Li, Yi

; APPLICANT: Bawden, Alison Louise

; TITLE OF INVENTION: Materials and Methods for Delivery and Expression of Heterologous

; FILE REFERENCE: UP-221C1XC1

; CURRENT APPLICATION NUMBER: US/09/662,254B

; CURRENT FILING DATE: 2000-09-14

; PRIOR FILING DATE: 1998-05-29

; PRIOR FILING DATE: 1998-05-29

; PRIOR FILING DATE: 2000-08-10

; NUMBER OF SEQ ID NOS: 80

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 27

; LENGTH: 32392

; TYPE: DNA

; ORGANISM: Amsacta moorei entomopoxvirus

US-09-662-254B-27

Query Match 1.7%; Score 51.4; DB 3; Length 32392;
Best Local Similarity 44.0%; Pred. No. 0.075;
Matches 217; Conservative 0; Mismatches 276; Indels 0; Gaps 0;

Qy 460 TAGGATTCCTCTTTACAGTACAAACGAGACATTAATGTCAACTTGGAAATTTAATAAGGA 519
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Qy 520 CATTAGGAAACCTTTAATCCAGTTTTTGAAGTGCCTATGTTGTAGGTTTTTATTCGCT 579
Db 10097 AAATAAATAACAAATATTAATAATAGAAATTAATAATTTTAAATGTTAATAATATGAT 10038
Qy 580 TCGAGTAATGATTAATTTGAAACCACTCTTGGCGTAGCGAAGATTCATATCCCTATTC 639
Db 10037 ATTTTATGAATGTTATGGAAGTAAATTTGAAATTAATAAATAATGAAATTAATAA 9978
Qy 640 TGTTAGGCAAGTACAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 699
Db 9977 AAATACAAATAATATATAAATCAGATAATAATATATATGTTGTGCTTAATAAATAATAA 9918
Qy 700 ATATAGATATATGATGTTTGTCTTATAGATGAAGGATTTATCGCGTCCCTTTGTATTC 759
Db 9917 TTATCCTAAATAATATTTTATTAATAATAATTTTATAATTTACTTTTTTCTTAATAAT 9858
Qy 760 CTATATTAATAAATCTTTTAAATGCATTTTCTGGTGCCTTTTGTGCTCTGTAT 819
Db 9857 TTTAAATATGACGATGCTATAGAAATGTAATAATAAATAAATAAATAAATAAATAAATAA 9798
Qy 820 TTTTCTTTTGTGACCACTGATGGAACCTTTTGTATGATTTTATTAACCTTTTATTTAA 879

Db 9797 TAATATTAATCTAGAAATAATTTTAAACAAATATATTTAATAATAATAAATAATAA 9738
Qy 880 GTTACTAAATATCGAGATTTTCAGGAACAAACATAGAAATTTTCTTTGTCAAGAAAAATA 939
Db 9737 CATAAATACAAATCATGATTTTCATAACAGCATTTATACATATATAATTTGTAATAATAAAA 9678
Qy 940 AAACGAAATAAAT 952
Db 9677 TTGTTATATACAT 9665

RESULT 14

US-09-662-254B-23

; Sequence 23, Application US/09662254B

; Patent No. 6933145

; GENERAL INFORMATION:

; APPLICANT: Moyer, Richard W.

; APPLICANT: Li, Yi

; APPLICANT: Bawden, Alison Louise

; TITLE OF INVENTION: Materials and Methods for Delivery and Expression of Heterologous

; FILE REFERENCE: UP-221C1XC1

; CURRENT APPLICATION NUMBER: US/09/662,254B

; CURRENT FILING DATE: 2000-09-14

; PRIOR FILING DATE: 1998-05-29

; PRIOR FILING DATE: 1998-05-29

; PRIOR FILING DATE: 2000-08-10

; NUMBER OF SEQ ID NOS: 80

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 23

; LENGTH: 50000

; TYPE: DNA

; ORGANISM: Amsacta moorei entomopoxvirus

US-09-662-254B-23

Query Match 1.7%; Score 51.4; DB 3; Length 50000;
Best Local Similarity 43.4%; Pred. No. 0.085; Indels 9; Gaps 3;
Matches 388; Conservative 0; Mismatches 496;

Qy 591 TTAATTTTGAACCATCTTGGCGTAGCGAAGATTCCTATTCCTTTCTGTTAGCAAG 650
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Qy 651 TGACAAATAAATAAACATTTAGAAAAATTCGTTACTTTCTTATAGATATAGATATA 710
Db 16882 ATACTATTTATATAATTTATATGATCATTTAATAATAATTTTATTTATTTTCCA 16941
Qy 711 TGTATGTTTGTCTATAGATGAAGGTATTTATCGCGTCTTTGTATTCCTTATTAAT 770
Db 16942 TAGATGGTATCATAAATATATTTATATATATTAACAAT---CATTAATTAATTTTA 16998
Qy 771 AAAATCTTTTAAAAATGCAATTTTCTGGTCTCTTTTGTGTTCTGTTATTTTCTTTT 830
Db 16999 GTTATATATGTCATTTCTTTTATTTATTTATCTGTTTTATCAATAATTTTGTATTT 17058
Qy 831 TGAACCACTGGATGGAACCTTTGATGATTTTATTTACCTTTTATTTAAGTTACTAAAT 890
Db 17059 TTTAATAAATAATCATATAATCAATTAATAACACATTTAATAATTTTAAATTTTCAAT 17118
Qy 891 ATCGAGATTTTCAGGAACAAACATAGAAATTTCTTTGTCAAGAAAAATAAACA--- 945
Db 17119 AAAATTTAAGATATATCATTAATATATATAATTTTATCAAAATTTATCATTAATTTT 17178
Qy 946 AATAAATTTGATGCTTTGACTACTGCTGTGTCAATAGAGAACAGAACAGCAATGCT 1005
Db 17179 AATTAAATCAATATTTTGTGTTTTTATTAACAGTTAATAATCATATTTATATAATCAAT 17238
Qy 1006 ACAATTTCTCAACATTTCTAGTGTCTCTATACATCTCATATCTATGTGCTACCGCTATA 1065
Db 17239 AATTATATTAAT---TTTATTTGACATAATCATCAATTAATCATATATCAATCTATGAGTTAT 17297

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Job time : 523.407 secs

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	Best Local Similarity	50.0%;	Prod. No. 0.3;		
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Qy	694	TTATAGATATAGATATATGTA-TGGTTTGCTTATAGATGAAGGTATTTATCGGTCCTTTT			752
Db	483788	TTAGTTTGTGTGAATTTTATTTGCTTCCTTTACTAAATTTATCTTTTTTTTAGCCCTTTTT			483729
Qy	753	GTATTCCTCTATTATTAATAAAATCTCTTTTAAATGCATTTCTCGTGCCTCTTTTGTTGCT			812
Db	483728	TTATTTGCTTTTACTTAAATACATTAATTTGGGAAATTAATTCCTTTTTTGCTATTTCTACTGCT			483669
Qy	813	TCTGTAATTTTTTTTTTTTGGACCACTGGATGGAAAACTTTTGATGATTTTATTAACCTTTT			872
Db	483668	TTTACTTTTAATAGTGTCTTTTTTTTATCAGGAATAATACCAATGGCTTGAATAGTTGAATTT			483609

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OM protein - protein search, using sw model

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(without alignments)
1380.324 Million cell updates/sec

Title: US-09-165-460A-4
Perfect score: 1651
Sequence: 1 MLQSFSTLVLLIYISIVLP.....ISLKDITLQTLVGTGVRITL 315

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Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues
Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	228.5	13.8	329	2	US-09-022-669-2
3	228.5	13.8	329	2	US-09-603-567-2
4	227.5	13.8	329	2	US-09-262-749-2
5	109.5	6.6	733	2	US-09-134-001C-3586
6	105.5	6.4	223	2	US-09-583-110-5133
7	105.5	6.4	235	2	US-09-107-433-2959
8	104.5	6.3	289	2	US-09-134-001C-2917
9	97	5.9	331	2	US-09-170-496D-184
10	96.5	5.8	424	2	US-09-107-532A-5459
11	96.5	5.8	456	2	US-09-058-389A-2
12	96.5	5.8	456	2	US-09-611-781-2
13	96.5	5.8	457	2	US-09-949-016-7211
14	96	5.8	331	2	US-09-170-496D-36
15	96	5.8	331	2	US-09-910-695-4
16	95.5	5.8	662	2	US-09-248-796A-16055
17	94.5	5.7	373	2	US-09-248-796A-17973
18	93.5	5.7	755	2	US-09-489-039A-9089
19	93	5.6	384	2	US-09-134-001C-4201
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25	91.5	5.5	470	2	US-10-176-255-25
26	91.5	5.5	471	1	US-07-817-920-8
27	91.5	5.5	471	1	US-08-370-542-7

28	91.5	5.5	471	1	US-08-117-006-8	Sequence 8, Appli
29	91.5	5.5	471	1	US-08-216-594-8	Sequence 8, Appli
30	91.5	5.5	471	1	US-08-542-358-7	Sequence 7, Appli
31	91.5	5.5	471	1	US-08-244-434-2	Sequence 2, Appli
32	91.5	5.5	471	2	US-09-018-351-7	Sequence 7, Appli
33	91.5	5.5	471	2	US-09-032-742-8	Sequence 8, Appli
34	91.5	5.5	471	2	US-09-145-864-2	Sequence 2, Appli
35	91.5	5.5	471	2	US-09-170-496D-122	Sequence 122, App
36	91.5	5.5	471	2	US-10-092-138A-28	Sequence 28, Appl
37	91.5	5.5	471	2	US-08-681-219A-28	Sequence 28, Appl
38	91.5	5.5	471	4	PCT-US93-00149-8	Sequence 8, Appli
39	91	5.5	270	2	US-09-910-695-10	Sequence 10, Appl
40	90	5.5	342	2	US-09-826-509-555	Sequence 555, App
41	90	5.5	360	2	US-09-328-352-7879	Sequence 7879, Ap
42	89.5	5.4	471	1	US-07-996-772A-11	Sequence 11, Appl
43	89.5	5.4	471	2	US-09-032-742-2	Sequence 2, Appli
44	89.5	5.4	471	2	US-09-145-864-4	Sequence 4, Appli
45	89	5.4	397	2	US-09-107-532A-4918	Sequence 4918, Ap

ALIGNMENTS

RESULT 1
US-09-184-964-4
; Sequence 4, Application US/09184964
; Patent No. 6391574
; GENERAL INFORMATION:
; APPLICANT: Rine, Jasper D.
; APPLICANT: Boyartchuk, Victor L.
; APPLICANT: Ashby, Matthew N.
; TITLE OF INVENTION: APCI AND RCE1: ISOPRENYLATED CAAX
; TITLE OF INVENTION: PROCESSING ENZYMES
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill road, suite 100
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/184,964
; FILING DATE: 03-NOV-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/902,774
; FILING DATE: 30-JUL-1997
; APPLICATION NUMBER: 60/023,491
; FILING DATE: 07-AUG-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Suvart, Reginald J.
; REGISTRATION NUMBER: 28,172
; REFERENCE/DOCKET NUMBER: 09272-006004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/322-5070
; TELEFAX: 650/854-0875
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 315 amino acids
; TYPE: amino acid
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: peptide
; LOCATION: 1...315
; OTHER INFORMATION: /note = "The sequence of the Rcelp
; OTHER INFORMATION: protein from yeast presented as a polypeptide sequence"
US-09-184-964-4

Query Match	98.2%	Score 1621;	DB 2;	Length 315;
Best Local Similarity	98.4%;	Pred. No. 5.4e-169;		
Matches 310; Conservative	1;	Mismatches 4;	Indels 0;	Gaps 0;
Qy 1	MLQFSFLVLLYISISYVLPLYATSQPEGSKRONPRTIKSRMOKLITMLISNLFVLVFLQ	60		
Db 1	MLQFSFLVLLYISISYVLPLYATSQPEGSKRONPRTIKSRMOKLITMLISNLFVLVFLQ	60		
Qy 61	SQLSSTTSHISFKDAFLGLGIIPGYAAALPNPWFQSFVKDLTKCVAMLLITLYCGPVLD	120		
Db 61	SQLSSTTSHISFKDAFLGLGIIPGYAAALPNPWFQSFVKDLTKCVAMLLITLYCGPVLD	120		
Qy 121	VLVHLLNPKSIILEDIFYHEFLNITWSPNFNIFAPITTEIFYTSMLLTYNLNIPHSQISYQ	180		
Db 121	VLVHLLNPKSIILEDIFYHEFLNITWSPNFNIFAPITTEIFYTSMLLTYNLNIPHSQISYQ	180		
Qy 181	QLFWQPSLFFGLAHAAHAYEQLOGSMTTVSILLTTCFQILYTTFLFGLTKFVFRVGTGN	240		
Db 181	QLFWQPSLFFGLAHAAHAYEQLOGSMTTVSILLTTCFQILYTTFLFGLTKFVFRVGTGN	240		
Qy 241	LWCCIIILHALCNMGFFGPPSRNLNHLFTVDDKAGRISKLSIWNKCYFALLVGLISLKD	300		
Db 241	LWCCIIILHALCNMGFFGPPSRNLNHLFTVDDKAGRISKLSIWNKCYFALLVGLISLKD	300		
Qy 301	TLQTLVGTPGYRITL 315			
Db 301	TLGTLVGTPGYRITL 315			

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; MOLECULE TYPE: protein
; US-09-022-669-2

Query Match 13.8%; Score 228.5; DB 2; Length 329;
Best Local Similarity 30.6%; Pred. No. 1.8e-16;
Matches 83; Conservative 39; Mismatches 82; Indels 67; Gaps 15;

Qy 11 LYISISYVLPYATSQEGSKRDNPRTIKSRMQKLTIMLISNLF-LVPFLQOLSST--- 66
Db 43 LSLACSIVGSLYVWKSE--LPRDHPAVIKRRF--TSVLVSVSSPLCVLLWRELTGTQPG 98
Qy 67 TSHISFKDAFLGLGIIPGYAALPNPWPQSQFVKDLTKCVAMLLT--LYCGPVLDFV--- 121
Db 99 TSLIUTLM-GFRLEGIFPA--ALLP-----LLLTMLFLGLPQLMSMDC 138
Qy 122 -----LYHLNPKSILEDFVHEFLNIWS-----PRNFIFAPITEEIFYTSMLLT 166
Db 139 PCDLADGLKVVLAPRS-----WARCLTDMRWLRNQVIAPLTELVEFRACMLP 185
Qy 167 TYLNLIPHSOLSYQQLFWQPSLFFGLAHAHAYEQLEGSMTTVSILLTTCFOILYTTLF 226
Db 186 M---LAPCMGLG-PAVFTCP-LFFGVAFPHHIIEQLRFRQSSVGNIFLSAAFPPTYAVF 240
Qy 227 GGLTKFVFRTGGNLMWCCIIILHALCNIMGPP 257
Db 241 GAYTAFIFIRT-GHLIGPVLCHSFNCYMGFP 270

RESULT 3
US-09-603-567-2
; Sequence 2, Application US/09603567
; Patent No. 6417332
; GENERAL INFORMATION:
; APPLICANT: KIKLY, KRISTINE K.
; APPLICANT: SOUTHAN, CHRISTOPHER D.
; APPLICANT: KNAB, ANNE M.
; TITLE OF INVENTION: HUMAN RCE1
; FILE REFERENCE: GH-30403-D1
; CURRENT APPLICATION NUMBER: US/09/603,567
; CURRENT FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: 97304437.3
; PRIOR FILING DATE: 1997-06-24
; PRIOR APPLICATION NUMBER: 09/022,669
; PRIOR FILING DATE: 1998-02-12
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 329
; TYPE: PRT
; ORGANISM: HOMO SAPIENS
US-09-603-567-2

Query Match 13.8%; Score 228.5; DB 2; Length 329;
Best Local Similarity 30.6%; Pred. No. 1.8e-16;
Matches 83; Conservative 39; Mismatches 82; Indels 67; Gaps 15;

Qy 11 LYISISYVLPYATSQEGSKRDNPRTIKSRMQKLTIMLISNLF-LVPFLQOLSST--- 66
Db 43 LSLACSIVGSLYVWKSE--LPRDHPAVIKRRF--TSVLVSVSSPLCVLLWRELTGTQPG 98
Qy 67 TSHISFKDAFLGLGIIPGYAALPNPWPQSQFVKDLTKCVAMLLT--LYCGPVLDFV--- 121
Db 99 TSLIUTLM-GFRLEGIFPA--ALLP-----LLLTMLFLGLPQLMSMDC 138
Qy 122 -----LYHLNPKSILEDFVHEFLNIWS-----PRNFIFAPITEEIFYTSMLLT 166
Db 139 PCDLADGLKVVLAPRS-----WARCLTDMRWLRNQVIAPLTELVEFRACMLP 185
Qy 167 TYLNLIPHSOLSYQQLFWQPSLFFGLAHAHAYEQLEGSMTTVSILLTTCFOILYTTLF 226
Db 186 M---LAPCMGLG-PAVFTCP-LFFGVAFPHHIIEQLRFRQSSVGNIFLSAAFPPTYAVF 240
Qy 227 GGLTKFVFRTGGNLMWCCIIILHALCNIMGPP 257

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Db 241 GAYTAFLFIRT-GHLIGPVLCHSFNCYMGFP 270

RESULT 4

US-09-262-749-2
; Sequence 2, Application US/09262749
; Patent No. 6261793
; GENERAL INFORMATION:
; APPLICANT: Whyte, David
; APPLICANT: McGuirk, Marne
; APPLICANT: Nunez-Oliva, Irma
; APPLICANT: Hockenberry, Tish
; APPLICANT: Pai, James
; TITLE OF INVENTION: RAS CONVERTING ENDOPROTEASE (RCE) AND
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Schering-Plough Corporation
; STREET: 2000 Galloping Hill Road K-6-1-1990
; CITY: Kenilworth
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07033
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: Power Macintosh
; OPERATING SYSTEM: MACOS
; SOFTWARE: Microsoft Word
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/262,749
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Thampoe, Immac J
; REGISTRATION NUMBER: 36,322
; REFERENCE/DOCKET NUMBER: OCO1005
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (908) 298-5061
; TELEFAX: (908) 298-5388
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 329 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-262-749-2

Query Match 13.8%; Score 227.5; DB 2; Length 329;
Best Local Similarity 28.7%; Pred. No. 2.3e-16;
Matches 81; Conservative 39; Mismatches 73; Indels 89; Gaps 14;
Qy 11 LVISISYLPYATSOPEGSKRDNPRTIKSRMQLTIMLISNLF-LVPFLQSLSTTSH 69
Db 43 LSLACSYGSLVWKSE--LPRDHAVIKRFE--TSVLVWSLSPLVLLNRELT----- 93
Qy 70 ISFKDAFLGLGIIPG-----YYAALPNWQSFQVVDLTKCVAMLLT--LY 113
Db 94 -----GIQPGTSLTLTMGRLEGIFLAAL-----LPLLLTMI LF 127
Qy 114 CQVLDV-----LYHLNPKSSILEDYHEFLNIWS-----PKNFIFAPIT 155
Db 128 LGFLMQLSMDPCDADLGLKVLAPRS-----WARCITDMRWLRNQVIAPLT 174
Qy 156 BEIFYSMLTLYLNIHPSQSLQYQQLFWQPSLFFGLAHAYEQLOEGMTTTSVILIT 215
Db 175 BELVFRACMLPM---LAPCMGLG-PAVFTCP-LFGVAHFHIIIEQLFRQSSVGNIFLS 229
Qy 216 TCFQILYTLTFLGGLTKFVFRVTGGNLWCIIHLACINMGFP 257
Db 230 AAFQFSYTAVFAYTAFLFIRT-GHLIGPVLCHSFNCYMGFP 270

RESULT 5

US-09-134-001C-3586
; Sequence 3586, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE REFERENCE: GTC-007
; CURRENT APPLICATION NUMBER: US/09/134,001C
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 3586
; LENGTH: 739
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-3586

Query Match 6.6%; Score 109.5; DB 2; Length 739;
Best Local Similarity 24.2%; Pred. No. 0.0059;
Matches 55; Conservative 33; Mismatches 76; Indels 63; Gaps 10;
Qy 38 IKRMQKLTIMLISNLFVLPFLQSLSTT-----SHISFKDAFL-GLCII 82
Db 254 VPSAMRAISATIIILMPLIPIHFKRSSIHVLSFIFVLMILLNPQFINHIGFQFSFLISLFI 313
Qy 83 PGYYAALPNWQSFQVVDLTKCVAMLLTLYCGPVLDFVLYHLNPKSSILEDFYH--EF 140
Db 314 -----LAKPY-----ISALKPKCLFIISF-----LAQLGSIVINTYHFNQF 350
Qy 141 LNIMSFNFIAP-----ITEEIFTSMLLTYLNLIPHSQSLYQQLFWQP 186
Db 351 QWIGLLSNFIPVPFYSFILFSPVYIIFILHFFQHSFLNTYINML-----FKIHDWL 404
Qy 187 SLFFGLAHAYEQLOEGMTTTSVILITTCFQILYTLTFLGGLTKFV 233
Db 405 QLFLNLNHLKWYIPKLNQYSL-LILILITLIF--LYLVYRGVTSV 448

RESULT 6

US-09-583-110-5133
; Sequence 5133, Application US/09583110
; Patent No. 6699703
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al.
; TITLE OF INVENTION: Nucleic Acid and Amino Acid Sequences Relating to Streptococcus
; FILE REFERENCE: PATH00-07A
; CURRENT APPLICATION NUMBER: US/09/583,110
; CURRENT FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/107,433
; PRIOR FILING DATE: 1998-06-30
; PRIOR APPLICATION NUMBER: US 60/085,131
; PRIOR FILING DATE: 1998-05-12
; PRIOR APPLICATION NUMBER: US 60/051,553
; PRIOR FILING DATE: 1997-07-02
; NUMBER OF SEQ ID NOS: 5322
; SEQ ID NO 5133
; LENGTH: 223
; TYPE: PRT
; ORGANISM: Streptococcus pneumoniae
US-09-583-110-5133

Query Match 6.4%; Score 105.5; DB 2; Length 223;
Best Local Similarity 21.3%; Pred. No. 0.0031;
Matches 54; Conservative 35; Mismatches 85; Indels 79; Gaps 10;
Qy 42 MQKLTIMLISNLFVLPFLQSLSTTSHISFKDAFLGLGIIPGYAALPNWQSFQVVD 101


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RESULT 9
US-09-170-496D-184
; Sequence 184, Application US/09170496D
; Patent No. 6555339
; GENERAL INFORMATION:
; APPLICANT: Behan, Dominic P.
; APPLICANT: Chalmers, Derek T.
; APPLICANT: Liaw, Chen W.
; TITLE OF INVENTION: Receptors
; FILE REFERENCE: AREN-0040
; CURRENT APPLICATION NUMBER: US/09/170,496D
; CURRENT FILING DATE: 1998-10-13
; NUMBER OF SEQ ID NOS: 294
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 184
; LENGTH: 331
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-170-496D-184

Query Match      5.9%; Score 97; DB 2; Length 331;
Best Local Similarity 23.8%; Pred. No. 0.045;
Matches 35; Conservative 31; Mismatches 43; Indels 38; Gaps 8;

QY 7 FLVLYISISVPLVYATSPQEGSKRDNPRTIKSRMOKLTIMLISNLF--VPFLOSOLS 64
Db 196 FLPLFIMIGCVLVIHNLHGRTSKLKP-KVEKSKRIITLLVQVLVCFMPP----- 248
QY 65 STTSHSKDRLGGLGIIPGYAALPNW-OFSPQVLDLTKVAMLLTYCGPVLDFVLY 123
Db 249 ----HICF--APLMIGTGENSY-----NPGAFITFLMNLSTC-----LDVILY 286
QY 124 HLLNPKSSILEDFYHEFLNIMSRNFI 150
Db 287 YIVS-----KQFQARVISVMYLRNYL 307

RESULT 10
US-09-107-532A-5459
; Sequence 5459, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-ROM ISO9660
; COMPUTER: PC
; OPERATING SYSTEM: <Unknown>
; SOFTWARE: ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/107,532A
; FILING DATE: 30-Jun-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/085,598
; FILING DATE: 14 May 1998
; APPLICATION NUMBER: 60/051571
; FILING DATE: July 2, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Ariniello, Pamela Deneke
; REGISTRATION NUMBER: 40,489
; REFERENCE/DOCKET NUMBER: GTC-012
; TELECOMMUNICATION INFORMATION:

```

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; TELEPHONE: (781)893-5007
; TELEFAX: (781)893-8277
; INFORMATION FOR SEQ ID NO: 5459:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 424 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ORIGINAL SOURCE:
; ORGANISM: Enterococcus faecium
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (B) LOCATION 1...424
; SEQUENCE DESCRIPTION: SEQ ID NO: 5459:
US-09-107-532A-5459

Query Match      5.8%; Score 96.5; DB 2; Length 424;
Best Local Similarity 19.5%; Pred. No. 0.072;
Matches 74; Conservative 54; Mismatches 96; Indels 155; Gaps 22;

QY 7 FLVLYISISVPLVYATSPQEGSKRDNPRTIKSRMOKLTIMLI-----SNLFLV 56
Db 91 FALILYVLLLEFVI-----KRLSKHLSRNLSVIVVILFLLLGLGSIMLI 135
QY 57 PFLQSLSSTTSHI-----SFKDAFLGLGIIPGYAA-LPNPW 93
Db 136 PFLSEQATLISLPDLFQFQESLRQFLEKTPPADSFNQFFASIDDDVTSDIAGFIQNYW 195
QY 94 QF-SQFQVLDLTKCV-AMLLTYCGPVLDFVLYHLLNPKSSILEDFYHEFLNIM--SPRNF 149
Db 196 ESGAQRIISNFTVTAIFITLFTGPIVAFUL--LRDP-----QKFYQSVLAIVPPAFR-- 246
QY 150 IFAPITEIFEFTSMMLTYLNLIPHSOLSVOOL-----FWQSLPFLGL 192
Db 247 -----TDFKNL--TKIANQQLGSFLKGQIIASFIILGAVTVVOCFLIGL 287
QY 193 AHAHHAYEQLEGSMTTVSILLTTCFQIL--YTLFGL-----TKFVVRGTG 239
Db 288 EFA-----SVLAISAGLLCIIPIYGPIAFFGLIIAFODSTFMVAKFVIV----- 333
QY 240 NLWCCI-ILH---ALCNIMGPPGPSRLNLH-FTVVDKKAGRIKSLVSIWNKCYFALLVLG 294
Db 334 --WFAVQLLHGLDVIPIVMG---DRLIQHPIIL-----IVLLVMG 369
QY 295 LISLKDILQTLVGTGPIRI 313
Db 370 --DLMGIVGVIFGPIYTL 386

RESULT 11
US-09-058-389A-2
; Sequence 2, Application US/09058389A
; Patent No. 6130065
; GENERAL INFORMATION:
; APPLICANT: Belt, Judith A.
; APPLICANT: Crawford, Charles R.
; APPLICANT: Patel, Divyen
; TITLE OF INVENTION: A NITROBENZYL MERCAPTOPYRINERIBOSIDE
; TITLE OF INVENTION: (NEMPR)-INSENSITIVE, EQUILIBRATIVE, NUCLEOSIDE TRANSPORT
; TITLE OF INVENTION: PROTEIN, NUCLEIC ACIDS ENCODING THE SAME AND METHODS OF
; TITLE OF INVENTION: USE
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: David A. Jackson, Esq.
; STREET: 411 Hackensack Ave, Continental Plaza, 4th
; CITY: Hackensack
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk

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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/058,389A
; FILING DATE: April 9, 1998
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Jackson Esq., David A.
; REGISTRATION NUMBER: 26,742
; REFERENCE/DOCKET NUMBER: 1340-1-013N
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-487-5800
; TELEFAX: 201-343-1684
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 456 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; DESCRIPTION: hENT2
; HYPOTHETICAL: NO
; FRAGMENT TYPE:
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
; US-09-058-389A-2

Query Match 5.8%; Score 96.5; DB 2; Length 456;
Best Local Similarity 23.3%; Pred. No. 0.08;
Matches 78; Conservative 43; Mismatches 129; Indels 85; Gaps 17;

QY 35 PRTIKSRMQLTMIISNLFV-----PFLQSLSTTSHISFKDAFLG-----LG 80
Db 94 PETVRILGSLAILLFAALVKVDMSPGPFITMASVCFINSFSAVLQSLFGQLG 153
QY 81 IIP-----GYAALPNPWFQSFVKD-----LTKCVAMLLTLYCG--- 115
Db 154 TPESTVSTFLSGQGLAGIFAALMLLSMASGVDAETSAIGYFITPCVGLMSIVCYLSL 213
QY 116 PVLDFVLVHLLNPKSSI-LEDFYHEFLNIWSFRNIFAPITEEIFYTSMLLTLYNL--I 172
Db 214 PHLKFARYYLANKSSQAQAQAELETKAELLQSDENGI--PSSPQ-----KVALTLDDLDEKE 267
QY 173 PHSQLSYQQLFWQPSLFFGLAHAAHAYEQLQEGSMTTV--SILLTT-CFOILYT---TLF 226
Db 268 PESEPDPEPKPKPSVF-----TVFQKIWLTAALCLVLFVFTVLSVF 308
QY 227 GGLTKFVVRTGNNLW-----CCIIHALCNIMGPPGSRNLNHTVVDKAGRIKSL 279
Db 309 PAITAMVTSSTSPGKWSQFNPICCFLLF--NIMDWLGRS-LTSYFLWPDEDS-RLLPL 363
QY 280 VSIWNKCYFALLVLGLISLKDITLQTLVGTGPGYRIT 314
Db 364 LVCLRLFLVPLFMLCHVPQSRPLPFPQDAYFIT 398

RESULT 12
US-09-611-781-2
; Sequence 2, Application US/09611781
; Patent No. 6423829
; GENERAL INFORMATION:
; APPLICANT: Belt, Judith A.
; APPLICANT: Crawford, Charles R.
; APPLICANT: Patel, Divyen
; TITLE OF INVENTION: A NITROBENZYL MERCAPTOPURINE BIOSIDE
; TITLE OF INVENTION: (NEMPR)-INSENSITIVE, EQUILIBRATIVE, NUCLEOSIDE TRANSPORT
; TITLE OF INVENTION: PROTEIN, NUCLEIC ACIDS ENCODING THE SAME AND METHODS OF
; TITLE OF INVENTION: USE
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: David A. Jackson, Esq.
; STREET: 411 Hackensack Ave, Continental Plaza, 4th
```

```
;
; STREET: Floor
; CITY: Hackensack
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/611,781
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 09/058,389
; FILING DATE: April 9, 1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Jackson Esq., David A.
; REGISTRATION NUMBER: 26,742
; REFERENCE/DOCKET NUMBER: 1340-1-013N
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-487-5800
; TELEFAX: 201-343-1684
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 456 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; DESCRIPTION: hENT2
; HYPOTHETICAL: NO
; FRAGMENT TYPE:
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
; US-09-611-781-2

Query Match 5.8%; Score 96.5; DB 2; Length 456;
Best Local Similarity 23.3%; Pred. No. 0.08;
Matches 78; Conservative 43; Mismatches 129; Indels 85; Gaps 17;

QY 35 PRTIKSRMQLTMIISNLFV-----PFLQSLSTTSHISFKDAFLG-----LG 80
Db 94 PETVRILGSLAILLFAALVKVDMSPGPFITMASVCFINSFSAVLQSLFGQLG 153
QY 81 IIP-----GYAALPNPWFQSFVKD-----LTKCVAMLLTLYCG--- 115
Db 154 TPESTVSTFLSGQGLAGIFAALMLLSMASGVDAETSAIGYFITPCVGLMSIVCYLSL 213
QY 116 PVLDFVLVHLLNPKSSI-LEDFYHEFLNIWSFRNIFAPITEEIFYTSMLLTLYNL--I 172
Db 214 PHLKFARYYLANKSSQAQAQAELETKAELLQSDENGI--PSSPQ-----KVALTLDDLDEKE 267
QY 173 PHSQLSYQQLFWQPSLFFGLAHAAHAYEQLQEGSMTTV--SILLTT-CFOILYT---TLF 226
Db 268 PESEPDPEPKPKPSVF-----TVFQKIWLTAALCLVLFVFTVLSVF 308
QY 227 GGLTKFVVRTGNNLW-----CCIIHALCNIMGPPGSRNLNHTVVDKAGRIKSL 279
Db 309 PAITAMVTSSTSPGKWSQFNPICCFLLF--NIMDWLGRS-LTSYFLWPDEDS-RLLPL 363
QY 280 VSIWNKCYFALLVLGLISLKDITLQTLVGTGPGYRIT 314
Db 364 LVCLRLFLVPLFMLCHVPQSRPLPFPQDAYFIT 398

RESULT 13
US-09-949-016-7211
; Sequence 2111, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
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; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CLO01307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7211
; LENGTH: 457
; TYPE: PRT
; ORGANISM: Human
; US-09-949-016-7211

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Query Match          5.8%; Score 96.5; DB 2; Length 457;
Best Local Similarity 23.3%; Pred. No. 0.08;
Matches 78; Conservative 43; Mismatches 129; Indels 85; Gaps 17;

Qy 35 PRTKSRMOKLTIMLISNLFV-----PFLQSSSTTSHISFKDAFLG-----LG 80
Db 95 PETVRILGSLAALLLFAALVAVKVDMPGPFSSITWASVCFNSFVAVLQSGSLFGQLG 154
Qy 81 IIP-----GYAALPNPWFQSFVKD-----LTKCVAMLLTYCG--- 115
Db 155 TMTSTYSTLFLSGQGLAGFAALAMLLSMASGVDAETSAIGYFVTPCVGILMSIVCYLSL 214
Qy 116 PVLPVLYHLNPKSSI-LEDFYHEFLNWSFRNFIAPITEIEFYTSMLTTVNLN--I 172
Db 215 PHLPARYLLANKSQAQAELETKAELTQSDENGI--PSPFQ-----KVALTLDLDEKE 268
Qy 173 PHSLSYQQLFWQPSLFFGLAHHAHYQLQEGSMTTV--SILLTT-CFQILYT---TLF 226
Db 269 PESPDEPQKPKPSVF-----TFVQKWLTLALCLVLFVTVLSVF 309
Qy 227 GGLTKFVFRVTRGGNLW-----CCILHALCINMGFPGRSLNHFVVDKKAGRISKL 279
Db 310 PAITAMVTSSTSPGKWSQFNFPCFLFLF--NIMDLGRS-LTSYFLWPDDEDS-RLPL 364
Qy 280 VSIWKKCVFALLVLGLISLKDTLQTLVGTGPGYRIT 314
Db 365 LVCLRFVLPVLMFLCHVPQGRSLPILFPQDAYFIT 399

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RESULT 14
US-09-170-496D-36
; Sequence 36, Application US/09170496D
; Patent No. 6555339
; GENERAL INFORMATION:
; APPLICANT: Behan, Dominic P.
; APPLICANT: Chalmers, Derek T.
; APPLICANT: Liaw, Chen W.
; TITLE OF INVENTION: No. 6555339-Endogenous, Constitutively Activated Human G Protein-
; FILE REFERENCE: AREN-0040
; CURRENT APPLICATION NUMBER: US/09/170,496D
; CURRENT FILING DATE: 1998-10-13
; NUMBER OF SEQ ID NOS: 294
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 36
; LENGTH: 331
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-170-496D-36

Query Match          5.8%; Score 96; DB 2; Length 331;
Best Local Similarity 24.3%; Pred. No. 0.058;
Matches 37; Conservative 31; Mismatches 36; Indels 48; Gaps 9;

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Qy 7 FLVLLYISIS-YVLPYATSQEGSKRDNPRTIKSRMOKLTIMLISNLF-----VPFL 59
Db 196 FLIPLFIMIGCYLVIHNLHGRTSK-----LKPVKEXSIRIITLLVQVLVCFMPF- 248
Qy 60 QSQSSSTTSHISFKDAFLGGLIIPGYAALPNPW-QFSQFVKDLTKCVAMLLTYCGPVL 118
Db 249 -----HICF--AFMLGTGENSY-----NPMGATTFMLNLSLTC-----L 281
Qy 119 DFVLYHLNPKSSILEDFYHEFLNWSFRNFI 150
Db 282 DVILYIIVS-----KOFQARVISVMLYRNYL 307

RESULT 15
US-09-910-695-4
; Sequence 4, Application US/09910695
; Patent No. 6737252
; GENERAL INFORMATION:
; APPLICANT: Hedrick, Joseph A.
; APPLICANT: Vicari, Alain P.
; APPLICANT: Zlotnik, Albert
; TITLE OF INVENTION: Mammalian Chemokines; Receptors;
; Reagents; Uses
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DNAX Research Institute
; STREET: 901 California Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/910,695
; FILING DATE: 20-Jul-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/122,585
; FILING DATE: 24-JUL-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Ching, Edwin P.
; REGISTRATION NUMBER: 34,090
; REFERENCE/DOCKET NUMBER: DX0757
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650) 852-9196
; TELEFAX: (650) 496-1200
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 331 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-910-695-4

Query Match          5.8%; Score 96; DB 2; Length 331;
Best Local Similarity 24.3%; Pred. No. 0.058;
Matches 37; Conservative 31; Mismatches 36; Indels 48; Gaps 9;

Qy 7 FLVLLYISIS-YVLPYATSQEGSKRDNPRTIKSRMOKLTIMLISNLF-----VPFL 59
Db 196 FLIPLFIMIGCYLVIHNLHGRTSK-----LKPVKEXSIRIITLLVQVLVCFMPF- 248
Qy 60 QSQSSSTTSHISFKDAFLGGLIIPGYAALPNPW-QFSQFVKDLTKCVAMLLTYCGPVL 118
Db 249 -----HICF--AFMLGTGENSY-----NPMGATTFMLNLSLTC-----L 281
Qy 119 DFVLYHLNPKSSILEDFYHEFLNWSFRNFI 150
Db 282 DVILYIIVS-----KOFQARVISVMLYRNYL 307

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Db 282 DVILYYVS-----KQFQARVISVWLYRNYL 307

Search completed: December 9, 2005, 03:03:10
Job time : 20.8672 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2005, 02:55:15 ; Search time 53.3203 Seconds
(without alignment)
2468.407 Million cell updates/sec

Title: US-09-165-460A-4
Perfect score: 1651
Sequence: 1 MLQSTFLVLLYISISVYLP.....ISLKDQLTLVGTGPGYRITL 315

Scoring table: BLOSUM62
Gapop 10.0, -Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA Main:
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2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pcp.*
3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pcp.*
4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pcp.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1651	100.0	315	4	US-10-646-950-4
2	249	15.1	290	6	US-11-097-143-9897
3	233.5	14.1	329	3	US-09-294-455-4
4	229.5	13.9	329	3	US-09-294-455-2
5	229.5	13.9	329	4	US-10-287-226-298
6	205	12.4	225	5	US-10-820-474A-114
7	193	11.7	149	4	US-10-767-701-58734
8	138	8.4	119	4	US-10-038-854-169
9	123	7.5	100	4	US-10-425-114-54947
10	123	7.5	149	4	US-10-424-599-221383
11	112.5	6.8	263	5	US-10-501-282-760
12	109.5	6.6	739	4	US-10-724-972A-4033
13	105.5	6.4	235	5	US-10-617-320-2959
14	104.5	6.3	289	4	US-10-724-972A-6754
15	103.5	6.3	223	5	US-10-472-928-1806
16	102.5	6.2	1474	4	US-10-369-493-2556
17	102	6.2	482	5	US-10-732-923-23704
18	101.5	6.1	312	5	US-10-774-355A-2432
19	99.5	6.0	757	5	US-10-487-887-6
20	99.5	6.0	757	5	US-10-792-307-6
21	99	6.0	321	3	US-09-815-242-12347
22	99	6.0	321	3	US-09-815-242-12347
23	99	6.0	321	4	US-10-282-122A-44257
24	99	6.0	321	5	US-10-857-625-616
25	98	5.9	760	5	US-10-487-887-2
26	98	5.9	760	5	US-10-792-307-2
27	97.5	5.9	341	4	US-10-424-599-246293

28	97.5	5.9	351	5	US-10-732-923-1406	Sequence 1406, Ap
29	97	5.9	331	4	US-10-251-385-184	Sequence 184, App
30	97	5.9	483	4	US-10-282-122A-54427	Sequence 54427, A
31	97	5.9	595	5	US-10-739-930-9909	Sequence 9909, Ap
32	96.5	5.8	237	4	US-10-425-114-37646	Sequence 37646, A
33	96.5	5.8	253	4	US-10-425-115-206342	Sequence 206342, A
34	96.5	5.8	456	5	US-10-756-149-5775	Sequence 5775, Ap
35	96	5.8	331	3	US-09-826-508-16	Sequence 16, Appl
36	96	5.8	331	3	US-09-910-695-4	Sequence 4, Appl
37	96	5.8	331	4	US-10-251-385-36	Sequence 36, Appl
38	96	5.8	331	4	US-10-225-567A-253	Sequence 253, App
39	96	5.8	331	4	US-10-411-010-18	Sequence 18, Appl
40	96	5.8	331	4	US-10-804-289-4	Sequence 4, Appl
41	96	5.8	331	5	US-10-370-715B-476	Sequence 476, App
42	96	5.8	331	5	US-10-953-264-18	Sequence 18, Appl
43	96	5.8	333	5	US-10-737-450-34	Sequence 34, Appl
44	96	5.8	569	5	US-10-505-486-112	Sequence 112, App
45	95	5.8	577	4	US-10-369-493-19737	Sequence 19737, A

ALIGNMENTS

RESULT 1
US-10-646-950-4
; Sequence 4, Application US/10646950
; Publication No. US20040072296A1
; GENERAL INFORMATION:
; APPLICANT: Rine, Jasper
; APPLICANT: Boyartchuk, Victor L
; APPLICANT: Ashby, Matthew N
; TITLE OF INVENTION: AFC1 and RCE1: Isoprenylated CAAX Processing Enzymes
; FILE REFERENCE: B96-021-3
; CURRENT APPLICATION NUMBER: US/10/646,950
; PRIOR FILING DATE: 2003-08-21
; PRIOR APPLICATION NUMBER: 60/023,491
; PRIOR FILING DATE: 1996-08-07
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 315
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-10-646-950-4

Query Match	100.0%	Score	1651;	DB	4;	Length	315;
Best Local Similarity	100.0%	Pred. No.	2.3e-154;	Mismatches	0;	Indels	0;
Matches	315;	Conservative					
QY	1	MLQSTFLVLLYISISVYLPYATSQPGSKRDNPRTIKSRMOKLTIMLISNLFVLPFLQ	60				
Db	1	MLQSTFLVLLYISISVYLPYATSQPGSKRDNPRTIKSRMOKLTIMLISNLFVLPFLQ	60				
QY	61	SQLSSTTSHISFKDAFLGLIIPGYAALPNPWFQSFVKDLTKCVAMLLTYCGPVLDF	120				
Db	61	SQLSSTTSHISFKDAFLGLIIPGYAALPNPWFQSFVKDLTKCVAMLLTYCGPVLDF	120				
QY	121	VLYHLLNPKSILEDFYHEFLNWSFRNFIAPITEEFYTSMLLTYYLTLFGGLTKFVFVRTGN	240				
Db	121	VLYHLLNPKSILEDFYHEFLNWSFRNFIAPITEEFYTSMLLTYYLTLFGGLTKFVFVRTGN	240				
QY	181	QLFWQPSLFFGLAAHAAHAYEQIQSGMTTVSILLTTCFQILYVTLTLFGGLTKFVFVRTGN	300				
Db	181	QLFWQPSLFFGLAAHAAHAYEQIQSGMTTVSILLTTCFQILYVTLTLFGGLTKFVFVRTGN	300				
QY	241	LMWCIIHALCNIMGFPSPRLNLHFTVVDKKAGRSKLSVSNWKCYPALLVLGLISLKD	300				
Db	241	LMWCIIHALCNIMGFPSPRLNLHFTVVDKKAGRSKLSVSNWKCYPALLVLGLISLKD	300				
QY	301	TLQTLVGTGPGYRITL	315				
Db	301	TLQTLVGTGPGYRITL	315				

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RESULT 2
US-11-097-143-9897
; Sequence 9897, Application US/11097143
; Publication No. US2005020858A1
; GENERAL INFORMATION:
; APPLICANT: Venter, J. Craig
; APPLICANT: et al.
; TITLE OF INVENTION: DETECTION KIT, SUCH AS NUCLEIC ACID
; TITLE OF INVENTION: ARRAYS, FOR DETECTING EXPRESSION OF 10,000 OR MORE
; FILE REFERENCE: DROSOPHILA GENES.
; CURRENT FILING DATE: 2005-04-04
; PRIOR FILING DATE: 2005-04-04
; PRIOR FILING DATE: 1999-10-05
; PRIOR FILING DATE: 1999-10-05
; PRIOR FILING DATE: 1999-10-19
; PRIOR FILING DATE: 1999-10-28
; PRIOR FILING DATE: 1999-10-28
; PRIOR FILING DATE: 1999-11-12
; PRIOR FILING DATE: 1999-11-12
; PRIOR FILING DATE: 2000-02-24
; PRIOR FILING DATE: 2000-02-24
; PRIOR FILING DATE: 2000-03-23
; NUMBER OF SEQ ID NOS: 43008
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9897
; LENGTH: 290
; TYPE: PRT
; ORGANISM: DROSOPHILA
US-11-097-143-9897

```

```

Query Match 15.1%; Score 249; DB 6; Length 290;
Best Local Similarity 29.1%; Pred. No. 6.6e-16;
Matches 75; Conservative 52; Mismatches 83; Indels 48; Gaps 14;

QY 8 LVLVYISYVLYATQSGKRDNPRTIKSRMOKLTIMLISNLF-LVPFLOQSSST 67
DB 25 LADVYGSLYI---WSTKH---NRDHTTVKRFASVSMVLAAPFVFFSS--PELL 75

QY 68 SHISFKDAFLGLGIPGYAALPNWQFSQFVKDLTKCVAMLLTYLVCVPVDFVLYHLN 127
DB 76 SRVPF-PKLLGLR-LEGLQAVVIFY-----SLTVLLFLGPI-----FVN 113

QY 128 PKSSILEDVYHEFLNIW--SF-----RNFIAPITEIEFTSMLLTTYLNLIHPSQLSY 179
DB 114 MONESVRSYFD--LDYWRGSGSIWVRNHIAPLSEEFVFRACMMP---LILQSFSP 167

QY 180 QQLPQWPSLFFGLAHAYEQEGSMVTTSVILLTTCFOILYTLTFLGGLTKFVFRGTG 239
DB 168 VAVFITP-LFFGVVHLHIAERISGLVELSTALLI-GLFQFIYTLTFLGFSAPLFA 224

QY 240 NLWCCIIHALCNIMGFP 257
DB 225 HVMAPILVHAFCNHMLP 242

```

```

RESULT 3
US-09-294-455-4
; Sequence 4, Application US/09294455
; Publication No. US20030013181A1
; GENERAL INFORMATION:
; APPLICANT: Choi, Yun-Jung
; APPLICANT: No. US20030013181A1, Anne K.
; APPLICANT: Martin, George A.
; APPLICANT: Bollag, Gideon
; TITLE OF INVENTION: No. US20030013181A1 Nucleic Acid and Polypeptides Related to a

```

```

; TITLE OF INVENTION: Farnesyl-Directed Endopeptidase
; FILE REFERENCE: 1035-US
; CURRENT APPLICATION NUMBER: US/09/294,455
; CURRENT FILING DATE: 1999-04-19
; EARLIER APPLICATION NUMBER: 60/086,421
; EARLIER FILING DATE: 1998-05-22
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 329
; TYPE: PRT
; ORGANISM: Mouse RCE1
US-09-294-455-4

```

```

Query Match 14.1%; Score 233.5; DB 3; Length 329;
Best Local Similarity 30.9%; Pred. No. 2.6e-14;
Matches 86; Conservative 41; Mismatches 80; Indels 71; Gaps 16;

QY 4 FSTFLVLLYISYVLYATQSGKRDNPRTIKSRMOKLTIMLISNLF-LVPFLOQ 62
DB 40 FSCF-----SLACSYVGSLYWKSE--LPRDHPAVIKRR--STSVLVVSSSLPCLVLLWRE 91

QY 63 LSST---TSHISFKDAFLGLGIPGYAALPNWQFSQFVKDLTKCVAMLLT--LYCGPV 117
DB 92 LTGIQPGTSLTLM-GFRLEGIFP---AAL-----LALLLTMLFLGPL 131

QY 118 LDFV-----LYHLLNPKSSILEDVYHEFLNIW-----FRNFIAPITEIEF 159
DB 132 MQLSMDPCDCLTDGLKVLAPRS-----WARCLTDMRLNRQVIAPLTEELV 178

QY 160 YTSMLLTLYLNLIHPSQLSYQQLFWQPSLFFGLAHAYEQEGSMVTTSVILLTTCFQ 219
DB 179 FRACMLPM---LAPCTGLG-PAVFTCP-LFFGVVHFIIEQLRFPQSSVGSIFVSAFQ 233

QY 220 ILYTTLFGLGTRKVFVRTGCGNLWCCIIHALCNIMGFP 257
DB 234 FSVTAVFGAYTAFLFIRT-GHLIGPVLCHSFQNYMGFP 270

```

```

RESULT 4
US-09-294-455-2
; Sequence 2, Application US/09294455
; Publication No. US20030013181A1
; GENERAL INFORMATION:
; APPLICANT: Choi, Yun-Jung
; APPLICANT: No. US20030013181A1, Anne K.
; APPLICANT: Martin, George A.
; APPLICANT: Bollag, Gideon
; TITLE OF INVENTION: No. US20030013181A1 Nucleic Acid and Polypeptides Related to a
; TITLE OF INVENTION: Farnesyl-Directed Endopeptidase
; FILE REFERENCE: 1035-US
; CURRENT APPLICATION NUMBER: US/09/294,455
; CURRENT FILING DATE: 1999-04-19
; EARLIER APPLICATION NUMBER: 60/086,421
; EARLIER FILING DATE: 1998-05-22
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 329
; TYPE: PRT
; ORGANISM: Human RCE1
US-09-294-455-2

```

```

Query Match 13.9%; Score 229.5; DB 3; Length 329;
Best Local Similarity 30.6%; Pred. No. 6.5e-14;
Matches 83; Conservative 39; Mismatches 82; Indels 67; Gaps 15;

QY 11 LVISISVPLVLYATQSGKRDNPRTIKSRMOKLTIMLISNLF-LVPFLOQSSST--- 66
DB 43 LSLACSYVGSLYWKSE--LPRDHPAVIKRRF--TSVLVSSSLPCLVLLWRELTGQPG 98

QY 67 TSHISFKDAFLGLGIPGYAALPNWQFSQFVKDLTKCVAMLLT--LYCGPVLDFV--- 121

```


Db 99 TSLTLM-GPRLGIFPA--ALLP-----LLLTMLFLGFLMQLSMD 138
Qy 122 -----LYHLNPKSSILEDFYHEFLNWS-----FRNFIPAPITEEIFYTSMLLT 166
Db 139 PCDLADGLKVVLAPRS-----WARCLTDMRLNRQVIAPILELVRACMLP 185
Qy 167 TYNLNIPHSQSLYOQLFWQPSLFFGLAHAHAYEQLQSGMTTYSILLTTCFOILYTTLF 226
Db 186 M---LAPCMGLG-PAVFTCP-LFFGVAFHFHIIIEQLRFRQSSVGNIFLSAAAFQSYTAVF 240
Qy 227 GGLTKFVVRTGGNLMCCIIHALCNIMGFP 257
Db 241 GAYTAFIIRT-GHLIGPVLCHSFCNYMGFP 270

RESULT 5

US-10-287-226-298

; Sequence 298, Application US/10287226

; Publication No. US20040086875A1

GENERAL INFORMATION:

; APPLICANT: Agee, Michele L.,
; APPLICANT: Alsobrook, John P.,
; APPLICANT: Berghs, Constance,
; APPLICANT: Boldog, Ference,
; APPLICANT: Burgess, Catherine E.,
; APPLICANT: Chant, John S.,
; APPLICANT: Chaudhuri, Amitabha,
; APPLICANT: DiPippo, Vincent A.,
; APPLICANT: Edinger, Shlomit R.,
; APPLICANT: Eisen, Andrew,
; APPLICANT: Ellerman, Karen,
; APPLICANT: Gangolli, Esha A.,
; APPLICANT: Gorman, Linda,
; APPLICANT: Gerlach, Valerie,
; APPLICANT: Ji, Weizhen,
; APPLICANT: Kekuda, Ramesh,
; APPLICANT: Khramtsov, Nikolai,
; APPLICANT: Li, Li,
; APPLICANT: Malyankar, Uriel M.,
; APPLICANT: MacDougall, John R.,
; APPLICANT: Mezes, Peter S.,
; APPLICANT: Miller, Charles E.,
; APPLICANT: Millet, Isabelle,
; APPLICANT: Ooi, Chean Eng,
; APPLICANT: Ort, Tatiana,
; APPLICANT: Padigaru, Muralidhara,
; APPLICANT: Patturajan, Meera,
; APPLICANT: Rastelli, Luca,
; APPLICANT: Rieser, Daniel K.,
; APPLICANT: Rothenberg, Mark E.,
; APPLICANT: Shenoy, Suresh G.,
; APPLICANT: Spaderna, Steven K.,
; APPLICANT: Spytek, Kimberley A.,
; APPLICANT: Taupier, Jr., Raymond J.,
; APPLICANT: Vernet, Corine A.M.,
; APPLICANT: Zerhusen, Bryan D.,
; APPLICANT: Zhong, Mei
; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
; FILE REFERENCE: 21402-480C
; CURRENT APPLICATION NUMBER: US/10/287,226
; CURRENT FILING DATE: 2002-11-04
; PRIOR APPLICATION NUMBER: 60/334,421
; PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: 60/354,392
; PRIOR FILING DATE: 2002-02-04
; PRIOR APPLICATION NUMBER: 60/360,148
; PRIOR FILING DATE: 2002-02-27
; PRIOR APPLICATION NUMBER: 60/364,000
; PRIOR FILING DATE: 2002-03-13
; PRIOR APPLICATION NUMBER: 60/404,821
; PRIOR FILING DATE: 2002-08-20
; PRIOR APPLICATION NUMBER: 60/334,526
; PRIOR FILING DATE: 2001-11-30

; PRIOR APPLICATION NUMBER: 60/354,409
; PRIOR FILING DATE: 2002-02-04
; PRIOR APPLICATION NUMBER: 60/364,227
; PRIOR FILING DATE: 2002-03-13
; PRIOR APPLICATION NUMBER: 60/334,027
; PRIOR FILING DATE: 2001-11-28
; PRIOR APPLICATION NUMBER: 60/331,641
; PRIOR FILING DATE: 2001-11-20
; Remaining Prior Application data removed - See File wrapper or PALM.
; NUMBER OF SEQ ID NOS: 673
; SOFTWARE: Curaseq1ist version 0.1
; SEQ ID NO 298
; LENGTH: 329
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-287-226-298

Query Match 13.9%; Score 229.5; DB 4; Length 329;
Best Local Similarity 30.6%; Pred. No. 6.5e-14;
Matches 83; Conservative 39; Mismatches 82; Indels 67; Gaps 15;

Qy 11 LYSISVVLPLYATSOPEGSKRDNPTIKSRMOKLTIMLISNLF-LVPFLQSLSSST--- 66
Db 43 LSLACSYVGSLYWKSE--LPRDHPAVIKRRF--TSVLVSSLSPLCVLLWRELTGIQPG 98
Qy 67 TSHISFKDAFLGLGIIPGYVAALPNWQFSQFVKDLTKCVAMLLT--LYCGPVLDFV--- 121
Db 99 TSLTLM-GPRLGIFPA--ALLP-----LLLTMLFLGFLMQLSMD 138
Qy 122 -----LYHLNPKSSILEDFYHEFLNWS-----FRNFIPAPITEEIFYTSMLLT 166
Db 139 PCDLADGLKVVLAPRS-----WARCLTDMRLNRQVIAPILELVRACMLP 185
Qy 167 TYNLNIPHSQSLYOQLFWQPSLFFGLAHAHAYEQLQSGMTTYSILLTTCFOILYTTLF 226
Db 186 M---LAPCMGLG-PAVFTCP-LFFGVAFHFHIIIEQLRFRQSSVGNIFLSAAAFQSYTAVF 240
Qy 227 GGLTKFVVRTGGNLMCCIIHALCNIMGFP 257
Db 241 GAYTAFIIRT-GHLIGPVLCHSFCNYMGFP 270

RESULT 6

US-10-820-474A-114

; Sequence 114, Application US/10820474A

; Publication No. US20050155089A1

GENERAL INFORMATION:

; APPLICANT: LAL, PREETI
; APPLICANT: TANG, Y. TOM
; APPLICANT: GORGONE, GINA A.
; APPLICANT: CORLEY, NEIL C.
; APPLICANT: GUEGLER, KARL J.
; APPLICANT: BAUGHN, MARIAH R.
; APPLICANT: AKERBLOM, INGRID E.
; APPLICANT: AU-YOUNG, JANICE
; APPLICANT: YUE, HENRY
; APPLICANT: PATTERSON, CHANDRA
; APPLICANT: REDDY, ROOPA
; APPLICANT: HILLMAN, JENNIFER L.
; APPLICANT: BANDMAN, OLGA
; TITLE OF INVENTION: SIGNAL PEPTIDE-CONTAINING MOLECULES
; FILE REFERENCE: 039386-1568
; CURRENT APPLICATION NUMBER: US/10/820,474A
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: 09/720,533
; PRIOR FILING DATE: 2001-03-20
; PRIOR APPLICATION NUMBER: PCT/US99/14484
; PRIOR FILING DATE: 1999-06-25
; PRIOR APPLICATION NUMBER: 60/090,762
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: 60/094,983
; PRIOR FILING DATE: 1998-07-31
; PRIOR APPLICATION NUMBER: 60/102,686

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; PRIOR FILING DATE: 1998-10-01
; NUMBER OF SEQ ID NOS: 269
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 114
; LENGTH: 225
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte Clone No: 2093492
US-10-820-474A-114

Query Match      12.4%; Score 205; DB 5; Length 225;
Best Local Similarity 31.8%; Pred.No. 1.1e-11;
Matches 63; Conservative 26; Mismatches 51; Indels 58; Gaps 10;

QY 80 GIIPGYAALPNPQFSQFVKDLTKVAMLLT--LYCGPVLDFV-----LYHLN 127
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 7 GIPFA--ALLP-----LTLTTLFGLPMLQSLMDCPCDLADGLKVLA 47

QY 128 PKSIILEDYHFEPLNIWS-----FRNPFAPITEEFYTSMLTTLNLIPLHPSQLSY 179
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 48 PRS-----WARCLDMRWLRNQVIAPLTELVELVFRACMLPM---LAPCMGLG- 90

QY 180 QQLFWOPSLFFGLAHAAHAYEQLQEGSMITVSIILTTTCFQILYTTTLFGGLTKFVFVRTGS 239
   :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 91 PAVFTCP-LFFGVAFHFIIEQRFSQSSVGNIFLSAAAFQFSYTAVFAYTAPLFIRT-G 148

QY 240 NLWCCILHALCINMGFP 257
   :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 149 HLIQPVLCHSFCNYMGFP 166

RESULT 7
US-10-767-701-58734
; Sequence 58734, Application US/10767701
; Publication No. US20040172684A1
; GENERAL INFORMATION:
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
; TITLE OF INVENTION: Plants and Uses Thereof For Plant Improvement
; FILE REFERENCE: 39-21(53535)B
; CURRENT APPLICATION NUMBER: US/10/767,701
; CURRENT FILING DATE: 2004-01-29
; NUMBER OF SEQ ID NOS: 63128
; SEQ ID NO 58734
; LENGTH: 149
; TYPE: PRT
; ORGANISM: Sorghum bicolor
; FEATURE:
; OTHER INFORMATION: Clone ID: 6674580.pap
US-10-767-701-58734

Query Match      11.7%; Score 193; DB 4; Length 149;
Best Local Similarity 29.4%; Pred.No. 9.5e-11;
Matches 45; Conservative 30; Mismatches 58; Indels 20; Gaps 4;

QY 153 PITEEIFYTSMLTTLNLIPLHPSQLSQQLFWQPSLFFGLAHAAHAYE-OLQEGSMITVS 211
   :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 2 PVSEUWRSLIIVPLHV----LAFSGKHIIFLTPLYFGIAHVHLLYFRITHPRVPFIL 57

QY 212 ILLTTCFQILYTTTLFGGLTKFVFVRTGNGNLWCCILHALCINMGFP----- 257
   :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 58 AVARSLFOQYTSLSFGFAAFVVRT-GNVYTCILAHAFCNMGLPRFYGRGVGAGVPI 116

QY 258 GPSRLNHLFTVDDKAGRISKLSINWKCYPAL 290
   ||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 117 GPDPVDKDDVDQKTAPAYHGKGIATVAYILI 149

RESULT 8
US-10-038-854-169
; Sequence 169, Application US/10038854
; Publication No. US20040022781A1
; GENERAL INFORMATION:
; APPLICANT: Spytek, Kimberly A
; APPLICANT: Li, Li
; APPLICANT: Wolenc, Adam R
; APPLICANT: Vernet, Corine
; APPLICANT: Eisen, Andrew J
; APPLICANT: Liu, Xiaohong
; APPLICANT: Malyankar, Uriel M
; APPLICANT: Shimkets, Richard A
; APPLICANT: Tchernev, Velizar
; APPLICANT: Spaderma, Steven K
; APPLICANT: Gorman, Linda
; APPLICANT: Kekuda, Ramesh
; APPLICANT: Patturajan, Meera
; APPLICANT: Gusev, Vladimir Y
; APPLICANT: Gangolli, Esha A
; APPLICANT: Guo, Xiaojia S
; APPLICANT: Shenoy, Suresh G
; APPLICANT: Rastelli, Luca
; APPLICANT: Casman, Stacie J
; APPLICANT: Boldog, Ferenc
; APPLICANT: Burgess, Catherine E
; APPLICANT: Edinger, Shlomit R
; APPLICANT: Ellerman, Karen
; APPLICANT: Gunther, Erik
; APPLICANT: Smithson, Glennda
; APPLICANT: Millet, Isabelle
; APPLICANT: MacDougall, John R
; TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
; FILE REFERENCE: 21402-230
; CURRENT APPLICATION NUMBER: US/10/038,854
; CURRENT FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: 60/258,928
; PRIOR FILING DATE: 2000-12-29
; PRIOR APPLICATION NUMBER: 60/259,415
; PRIOR FILING DATE: 2001-01-02
; PRIOR APPLICATION NUMBER: 60/259,785
; PRIOR FILING DATE: 2001-01-04
; PRIOR APPLICATION NUMBER: 60/269,814
; PRIOR FILING DATE: 2001-02-20
; PRIOR APPLICATION NUMBER: 60/279,832
; PRIOR FILING DATE: 2001-03-29
; PRIOR APPLICATION NUMBER: 60/279,833
; PRIOR FILING DATE: 2001-03-29
; PRIOR APPLICATION NUMBER: 60/279,863
; PRIOR FILING DATE: 2001-03-29
; PRIOR APPLICATION NUMBER: 60/283,889
; PRIOR FILING DATE: 2001-04-13
; PRIOR APPLICATION NUMBER: 60/284,447
; PRIOR FILING DATE: 2001-04-18
; PRIOR APPLICATION NUMBER: 60/286,683
; PRIOR FILING DATE: 2001-04-25
; Remaining Prior Application data removed - See File wrapper or PALM.
; NUMBER OF SEQ ID NOS: 411
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 169
; LENGTH: 119
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-038-854-169

Query Match      8.4%; Score 138; DB 4; Length 119;
Best Local Similarity 31.6%; Pred.No. 1.9e-05;
Matches 36; Conservative 21; Mismatches 45; Indels 12; Gaps 2;

QY 150 IFAPITEEFYTSMLTTLNLIPLHPSQLSQQLFWQP-----SLFFGLAHAAHAYEQL 202
   :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 8 LLAPLAEELFFRGILLTAL-----ERRKKRYTLFGPLLAIISSLIIFALLHLNALELL 62

QY 203 QEGSMITVSILLTTTCFQILYTTTLFGGLTKFVFVRTGNGNLWCCILHALCINMGF 256
```

Figure 1

```
; CURRENT FILING DATE: 2003-12-01
; PRIOR APPLICATION NUMBER: 09/450,969
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 7544
; SEQ ID NO 4033
; LENGTH: 739
; TYPE: PRT
; ORGANISM: S.epidermidis
; US-10-724-972A-4033

Query Match      6.6%; Score 109.5; DB 4; Length 739;
Best Local Similarity 24.2%; Pred. No. 0.13;
Matches 55; Conservative 33; Mismatches 76; Indels 63; Gaps 10;

Qy 38 IKSRMQLTLMISNLFVLPFLOSLSSTT-----SHISPKDAFL-GLGII 82
Db 254 VPSAMRAISATIIILMPIHFRKSSIHVLSFIFVLMILLNPQFINHGFSLSLFI 313
Qy 83 PGVYAALPNWQFSQFVKDLTKCVAMLLTLYCGPVLDFVLYHLLNPKSSILEDFYH--EF 140
Db 314 -----LAKPY-----ISALKPKLCFLISF-----LAQLGSIVINTYHFNQF 350
Qy 141 LNIWSPRNFIAP-----ITBEIFYTSMLLTYLNLPHSOLSQOQLFWQP 186
Db 351 QWIGLLSNFIVFPFYSILFPPSVIIVFILHFRQHSFLLNTYINML-----FKIHDLV 404
Qy 187 SLFFGLAHAAHAYEQLEQSGMTTVSILLTTCFOILYTLTFFGLTKFV 233
Db 405 QLFNLNLHLKWIYPKLNQYSL-LILILTLIF--LVILVYRGFVTSV 448

RESULT 13
US-10-617-320-2959
; Sequence 2959, Application US/10617320
; Publication No. US20050136404A1
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STREPTOCOCCUS PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 5206
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Walham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-ROM ISO9660
; COMPUTER: <Unknown>
; OPERATING SYSTEM: <Unknown>
; SOFTWARE: <Unknown>
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/617,320
; FILING DATE: 10-Jul-2003
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/107,433
; FILING DATE: 30-Jun-1998
; APPLICATION NUMBER: 60/ 085131
; FILING DATE: May 12, 1998
; APPLICATION NUMBER: 60/051553
; FILING DATE: July 2, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Ariniello, Pamela Deneke
; REGISTRATION NUMBER: 40,489
; REFERENCE/DOCKET NUMBER: GTC-011
```

```
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (781)893-5007
; TELEFAX: (781)893-8277
; INFORMATION FOR SEQ ID NO: 2959:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 235 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ORIGINAL SOURCE:
; ORGANISM: Streptococcus pneumoniae
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (B) LOCATION 1...235
; SEQUENCE DESCRIPTION: SEQ ID NO: 2959:
US-10-617-320-2959

Query Match      6.4%; Score 105.5; DB 5; Length 235;
Best Local Similarity 21.3%; Pred. No. 0.075;
Matches 54; Conservative 35; Mismatches 85; Indels 79; Gaps 10;

Qy 42 MOKLIMLISNLFVLPFLOSLSSTTSHISPKDAFLGLIIPGYAALPNWQFSQFVKD 101
Db 13 MKKRAIQILLALLIFPKSTWFRVFNHLA-----KPYLPASREFFQILL 58
Qy 102 LTKCVAMLLTY-----CGP-----VLDFVLYHLLNPKSSILEDF-YHEFLNIMS--- 145
Db 59 MESGVLFLAVIYLLVFPAGKKIFHKWQRYFIYLLGYIISYMSDFLSYFISLSNQIS 118
Qy 146 -----FRNFI-----FAPITEBIFYTSMLLTYLNLPHSOLSQOQLFWQ--- 185
Db 119 LNETVEMGRQEFYPYLLIVCVFIAPIELIYRGVLMTFEKNSP-----WYGDV 168
Qy 186 --PSLFFGLAHAAHAYEQLEQSGMTTVSILLTTCFOILYTLTFFGLTKFVFTGGLNLC 243
Db 169 LLSAIFGYIH-----INPALTPLAFFIYAS--GGLILALLYRMTKNLY 211

RESULT 14
US-10-724-972A-6754
; Sequence 6754, Application US/10724972A
; Publication No. US20040147734A1
; GENERAL INFORMATION:
; APPLICANT: Doucette-Stamm, Lynn
; APPLICANT: Bush, David
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: PATH03-16
; CURRENT APPLICATION NUMBER: US/10/724,972A
; CURRENT FILING DATE: 2003-12-01
; PRIOR APPLICATION NUMBER: 09/450,969
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 7544
; SEQ ID NO 6754
; LENGTH: 289
; TYPE: PRT
; ORGANISM: S.epidermidis
; US-10-724-972A-6754

Query Match      6.3%; Score 104.5; DB 4; Length 289;
Best Local Similarity 21.0%; Pred. No. 0.12;
Matches 66; Conservative 50; Mismatches 94; Indels 105; Gaps 14;
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OM protein - protein search, using sw model

Run on: December 9, 2005, 03:02:35 : Search time 6.15234 Seconds
(without alignments)
285.923 Million cell updates/sec

Title: US-09-165-460A-4

Perfect score: 1651

Sequence: 1 MLQSFTEVLVLLYISISYLP.....ISLKDITLQLTVGTPGYRITL 315

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 32527 seqs, 5584426 residues

Total number of hits satisfying chosen parameters: 32527

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA New:*

1: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB pep.*
2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB pep.*
3: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB pep.*
4: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB pep.*
5: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB pep.*
6: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB pep.*
7: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB pep.*
8: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	89.5	5.4	203	6	US-10-980-388-79
2	85	5.1	1804	6	US-10-513-786-2
3	85	5.1	3704	6	US-10-513-786-1
4	82	5.0	389	7	US-11-060-008-11
5	81.5	4.9	529	6	US-10-821-234-1168
6	80	4.8	580	6	US-10-821-234-1309
7	78.5	4.8	334	6	US-10-793-626-230
8	78.5	4.8	1125	6	US-10-821-234-1444
9	78	4.7	162	7	US-11-069-642-6
10	78	4.7	411	6	US-10-467-657-8252
11	77	4.7	113	6	US-10-821-234-1478
12	77	4.7	453	6	US-10-793-626-1516
13	76	4.6	295	6	US-10-793-626-654
14	76	4.6	554	7	US-11-000-463-240
15	75	4.5	459	7	US-11-186-284-12
16	75	4.5	534	7	US-11-075-185-17
17	75	4.5	633	7	US-11-119-683-3
18	73.5	4.5	324	6	US-10-793-626-1262
19	73.5	4.5	397	7	US-11-060-008-8
20	73.5	4.5	413	7	US-11-060-008-9
21	73.5	4.5	669	7	US-11-119-683-2
22	73	4.4	628	7	US-11-074-176-244
23	73	4.4	738	7	US-11-147-047-48
24	73	4.4	1070	7	US-11-147-047-49
25	72.5	4.4	538	7	US-11-119-683-1

ALIGNMENTS

RESULT 1

US-10-980-388-79
; Sequence 79, Application US/10980388
; Publication No. US20050255490A1

GENERAL INFORMATION:

; APPLICANT: Vogeli, Gabriel
; APPLICANT: Parodi, Luis A.
; APPLICANT: Hiebsch, Ronald R.
; APPLICANT: Lind, Peter
; APPLICANT: Kaytes, Paul S.
; APPLICANT: Ruff, Valerie
; APPLICANT: Huff, Rita M.
; APPLICANT: Wood, Linda S.
; TITLE OF INVENTION: Novel G Protein-Coupled Receptors Cross-Reference To Related Appl

; FILE REFERENCE: 00325-US1

; CURRENT APPLICATION NUMBER: US/10/980,388

; CURRENT FILING DATE: 2004-11-02

; PRIOR APPLICATION NUMBER: US/09/791,932

; PRIOR FILING DATE: 2001-02-23

; PRIOR APPLICATION NUMBER: 60/184,305

; PRIOR FILING DATE: 2000-02-23

; PRIOR APPLICATION NUMBER: 60/184,304

; PRIOR FILING DATE: 2000-02-23

; PRIOR APPLICATION NUMBER: 60/184,303

; PRIOR FILING DATE: 2000-02-23

; PRIOR APPLICATION NUMBER: 60/184,397

; PRIOR FILING DATE: 2000-02-23

; PRIOR APPLICATION NUMBER: 60/184,247

; PRIOR FILING DATE: 2000-02-23

; PRIOR APPLICATION NUMBER: 60/188,880

; PRIOR FILING DATE: 2000-03-13

; PRIOR APPLICATION NUMBER: 60/217,369

; PRIOR FILING DATE: 2000-07-11

; PRIOR APPLICATION NUMBER: 60/217,370

; PRIOR FILING DATE: 2000-07-11

; PRIOR APPLICATION NUMBER: 60/218,492

; PRIOR FILING DATE: 2000-07-20

; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 184

; SOFTWARE: Patentin version 3.0

; SEQ ID NO 79

; LENGTH: 203

; TYPE: PRT

; ORGANISM: Homo sapiens

US-10-980-388-79

Query Match 5.4%; Score 89.5; DB 6; Length 203;
Best Local Similarity 19.4%; Pred. No. 0.048;

Sequence 1090, Ap
Sequence 13, Appl
Sequence 238, App
Sequence 11, Appl
Sequence 44, App
Sequence 1834, Ap
Sequence 1558, Ap
Sequence 320, App
Sequence 68, Appl
Sequence 288, App
Sequence 46, Appl
Sequence 7578, Ap
Sequence 6260, Ap
Sequence 1523, Ap
Sequence 8, Appl
Sequence 320, App
Sequence 1236, Ap
Sequence 168, App
Sequence 576, App
Sequence 8482, Ap

26 72.5 4.4 563 6 US-10-821-234-1090
27 72.5 4.4 2333 7 US-11-096-281-13
28 71.5 4.3 541 7 US-11-000-463-238
29 71.5 4.3 2339 7 US-11-096-281-11
30 70.5 4.3 337 6 US-10-793-626-444
31 70.5 4.3 452 6 US-10-793-626-1834
32 70 4.2 499 6 US-10-793-626-1558
33 70 4.2 554 7 US-11-074-176-320
34 70 4.2 570 7 US-11-074-176-68
35 69.5 4.2 350 6 US-10-485-517-288
36 69 4.2 845 7 US-11-147-047-46
37 68.5 4.1 436 6 US-10-467-657-7578
38 68.5 4.1 623 6 US-10-467-657-6260
39 68.5 4.1 897 6 US-10-821-234-1523
40 68 4.1 336 7 US-11-099-691-8
41 68 4.1 368 7 US-11-082-389-320
42 68 4.1 391 6 US-10-793-626-1236
43 68 4.1 604 6 US-10-485-517-168
44 67.5 4.1 146 6 US-10-793-626-576
45 67.5 4.1 305 6 US-10-467-657-8482

```

Matches 51; Conservative 36; Mismatches 91; Indels 85; Gaps 9;
QY 41 RMOKLIMLISNLFVVPFLOSQSLSSTSHSPKDAFLGLIIPGYAALPNWQPSQFVK 100
Db 13 RKQKPRIMEF-----TCVSPTVVLSEY-----PMQ-----39
QY 101 DLTKCVAMLLTLYCGPVLDPVLYHLNPKSSILEDYFHEFLNIWSRNFIFAPITEEIFY 160
Db 40 -----LILLYS---LFLVLTCLKRTSNVNLDELKTE--NVCKVKYVKYKMYFSYFK 87
QY 161 TSMLLTYNLNLIPLHSQLSYQQLFWPQSLPFLGLAHAAHAYEQLOEGSMTTIVSILLTTCFOI 220
Db 88 SFILYITHTH-----THTH-----TWRSLLTTQYKI 113
QY 221 LYTTLFGGLTKFVFTGTGNNLWCCIIHALCNIMGFPGRSLNHLHTVVDKXAGR-----I 276
Db 114 IF--LRNIVPKYCFIPYKSNLWLFYGFHQAMSLTNFANKGTQGMKYLNTNKKPNSMYVI 171
QY 277 SKLVSIWKKCYFALLVGLISLK 299
Db 172 GKIKSSVNSIHELTSISALLSLK 194

RESULT 2
US-10-513-786-2
; Sequence 2, Application US/10513786
; Publication No. US20050260589A1
; GENERAL INFORMATION:
; APPLICANT: Bio Control Institute Limited
; APPLICANT: AGATA, Norio
; TITLE OF INVENTION: A cereulide synthetase, a gene thereof, and a detection method fo
; FILE REFERENCE: P0202401
; CURRENT APPLICATION NUMBER: US/10/513,786
; PRIOR FILING DATE: 2004-11-16
; PRIOR FILING DATE: 2002-05-17
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 2
; LENGTH: 1804
; TYPE: PRT
; ORGANISM: Bacillus cereus
US-10-513-786-2

Query Match 5.1%; Score 85; DB 6; Length 1804;
Best Local Similarity 22.5%; Pred. No. 1.8;
Matches 40; Conservative 23; Mismatches 65; Indels 50; Gaps 8;

QY 93 WQPSQFVKDLTKCV-----AMLLTLYCGPVLDPVLYHLNPKSSILEDYF--YH 138
Db 1049 WVLHEIVKERQDCLYITTSARTLLPGMTISAYCS-----ANRFVENFAYYQ 1095
QY 139 EFLNI-----WSRNFIFAPITEEIFYTSMLLTLYNLNLIPLHSQLSYQQLFW---OPSL 188
Db 1096 RSNVNSYCFWSFWNEI--CGMTNLLIKNALIAKGFQIDDDQGIYSLLAGLKGNPNV 1153
QY 189 FFLGLAH-----AHHAHQLOEGSMTTVSI-----LTTTCFQILYTTLFGGLTKFVFV 235
Db 1154 FVGINHEKEEMAHLIGTEQETQTLTIYTPVYLHILEEVFSILNREFFGGLKEIWI 1211

RESULT 3
US-10-513-786-1
; Sequence 1, Application US/10513786
; Publication No. US20050260589A1
; GENERAL INFORMATION:
; APPLICANT: Bio Control Institute Limited
; APPLICANT: AGATA, Norio
; TITLE OF INVENTION: A cereulide synthetase, a gene thereof, and a detection method fo
; FILE REFERENCE: P0202401
; CURRENT APPLICATION NUMBER: US/10/513,786
; PRIOR FILING DATE: 2004-11-16
; PRIOR FILING DATE: 2002-05-17
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 1
; LENGTH: 3704
; TYPE: PRT
; ORGANISM: Bacillus cereus
US-10-513-786-1

Query Match 5.1%; Score 85; DB 6; Length 3704;
Best Local Similarity 22.5%; Pred. No. 4.2;
Matches 40; Conservative 23; Mismatches 65; Indels 50; Gaps 8;

QY 93 WQPSQFVKDLTKCV-----AMLLTLYCGPVLDPVLYHLNPKSSILEDYF--YH 138
Db 1049 WVLHEIVKERQDCLYITTSARTLLPGMTISAYCS-----ANRFVENFAYYQ 1095
QY 139 EFLNI-----WSRNFIFAPITEEIFYTSMLLTLYNLNLIPLHSQLSYQQLFW---OPSL 188
Db 1096 RSNVNSYCFWSFWNEI--CGMTNLLIKNALIAKGFQIDDDQGIYSLLAGLKGNPNV 1153
QY 189 FFLGLAH-----AHHAHQLOEGSMTTVSI-----LTTTCFQILYTTLFGGLTKFVFV 235
Db 1154 FVGINHEKEEMAHLIGTEQETQTLTIYTPVYLHILEEVFSILNREFFGGLKEIWI 1211

RESULT 4
US-11-060-008-11
; Sequence 11, Application US/11060008
; Publication No. US20050257290A1
; GENERAL INFORMATION:
; APPLICANT: Kloeck, Andrew P.
; APPLICANT: Williams, Deryck J.
; APPLICANT: McLaird, Merry B.
; APPLICANT: Bradley, John D.
; APPLICANT: Davila-Aponte, Jennifer A.
; APPLICANT: Xu, Siqun
; APPLICANT: Frevert, Anita M.
; TITLE OF INVENTION: NEMATODE FATTY ACID DESATURASE-LIKE
; FILE REFERENCE: 12557-007001
; CURRENT APPLICATION NUMBER: US/11/060,008
; CURRENT FILING DATE: 2005-02-17
; PRIOR FILING DATE: US/10/243,468
; PRIOR FILING DATE: 2002-09-13
; PRIOR APPLICATION NUMBER: US 60/322,003
; PRIOR FILING DATE: 2001-09-13
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 389
; TYPE: PRT
; ORGANISM: Heterodera glycines
US-11-060-008-11

Query Match 5.0%; Score 82; DB 7; Length 389;
Best Local Similarity 19.7%; Pred. No. 0.56;
Matches 37; Conservative 30; Mismatches 63; Indels 58; Gaps 7;

QY 53 LFLVPLFQSLS-----STTSHIS-----FKDAFLGLIIPGYAALP-----NP 92
Db 132 LLMPFEPWQKSHRQHHQFTSHVDKDKGHPWLEDDYEGGWLKHKHFAKIPLSGLIRWNP 191
QY 93 -----WQPSQFVKDLTKCVAMLLTLYCGPVLDPVLYHLNPKSSILEDYFHE 139
Db 192 IYTVAGLPGDSHPFSPFSLPSNTERFKCLISSSLCLITSWAIFVLLDHP-----242
QY 140 FLNWSRNFIFAPITEEIFYTSMLLTLYNLNLIPLHSQLSYQQLFW-----QPSLF 189

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; FILE REFERENCE: P0202401
; CURRENT APPLICATION NUMBER: US/10/513,786
; CURRENT FILING DATE: 2004-11-16
; PRIOR FILING DATE: 2002-05-17
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 1
; LENGTH: 3704
; TYPE: PRT
; ORGANISM: Bacillus cereus
US-10-513-786-1

Query Match 5.1%; Score 85; DB 6; Length 3704;
Best Local Similarity 22.5%; Pred. No. 4.2;
Matches 40; Conservative 23; Mismatches 65; Indels 50; Gaps 8;

QY 93 WQPSQFVKDLTKCV-----AMLLTLYCGPVLDPVLYHLNPKSSILEDYF--YH 138
Db 1049 WVLHEIVKERQDCLYITTSARTLLPGMTISAYCS-----ANRFVENFAYYQ 1095
QY 139 EFLNI-----WSRNFIFAPITEEIFYTSMLLTLYNLNLIPLHSQLSYQQLFW---OPSL 188
Db 1096 RSNVNSYCFWSFWNEI--CGMTNLLIKNALIAKGFQIDDDQGIYSLLAGLKGNPNV 1153
QY 189 FFLGLAH-----AHHAHQLOEGSMTTVSI-----LTTTCFQILYTTLFGGLTKFVFV 235
Db 1154 FVGINHEKEEMAHLIGTEQETQTLTIYTPVYLHILEEVFSILNREFFGGLKEIWI 1211

RESULT 3
US-10-513-786-1
; Sequence 1, Application US/10513786
; Publication No. US20050260589A1
; GENERAL INFORMATION:
; APPLICANT: Bio Control Institute Limited
; APPLICANT: AGATA, Norio
; TITLE OF INVENTION: A cereulide synthetase, a gene thereof, and a detection method fo
; FILE REFERENCE: P0202401
; CURRENT APPLICATION NUMBER: US/10/513,786
; PRIOR FILING DATE: 2004-11-16
; PRIOR FILING DATE: 2002-05-17
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 2
; LENGTH: 1804
; TYPE: PRT
; ORGANISM: Bacillus cereus
US-10-513-786-2

Query Match 5.1%; Score 85; DB 6; Length 1804;
Best Local Similarity 22.5%; Pred. No. 1.8;
Matches 40; Conservative 23; Mismatches 65; Indels 50; Gaps 8;

QY 93 WQPSQFVKDLTKCV-----AMLLTLYCGPVLDPVLYHLNPKSSILEDYF--YH 138
Db 1049 WVLHEIVKERQDCLYITTSARTLLPGMTISAYCS-----ANRFVENFAYYQ 1095
QY 139 EFLNI-----WSRNFIFAPITEEIFYTSMLLTLYNLNLIPLHSQLSYQQLFW---OPSL 188
Db 1096 RSNVNSYCFWSFWNEI--CGMTNLLIKNALIAKGFQIDDDQGIYSLLAGLKGNPNV 1153
QY 189 FFLGLAH-----AHHAHQLOEGSMTTVSI-----LTTTCFQILYTTLFGGLTKFVFV 235
Db 1154 FVGINHEKEEMAHLIGTEQETQTLTIYTPVYLHILEEVFSILNREFFGGLKEIWI 1211

RESULT 3
US-10-513-786-1
; Sequence 1, Application US/10513786
; Publication No. US20050260589A1
; GENERAL INFORMATION:
; APPLICANT: Bio Control Institute Limited
; APPLICANT: AGATA, Norio
; TITLE OF INVENTION: A cereulide synthetase, a gene thereof, and a detection method fo
; FILE REFERENCE: P0202401
; CURRENT APPLICATION NUMBER: US/10/513,786
; PRIOR FILING DATE: 2004-11-16
; PRIOR FILING DATE: 2002-05-17
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 1
; LENGTH: 3704
; TYPE: PRT
; ORGANISM: Bacillus cereus
US-10-513-786-1

Query Match 5.1%; Score 85; DB 6; Length 3704;
Best Local Similarity 22.5%; Pred. No. 4.2;
Matches 40; Conservative 23; Mismatches 65; Indels 50; Gaps 8;

QY 93 WQPSQFVKDLTKCV-----AMLLTLYCGPVLDPVLYHLNPKSSILEDYF--YH 138
Db 1049 WVLHEIVKERQDCLYITTSARTLLPGMTISAYCS-----ANRFVENFAYYQ 1095
QY 139 EFLNI-----WSRNFIFAPITEEIFYTSMLLTLYNLNLIPLHSQLSYQQLFW---OPSL 188
Db 1096 RSNVNSYCFWSFWNEI--CGMTNLLIKNALIAKGFQIDDDQGIYSLLAGLKGNPNV 1153
QY 189 FFLGLAH-----AHHAHQLOEGSMTTVSI-----LTTTCFQILYTTLFGGLTKFVFV 235
Db 1154 FVGINHEKEEMAHLIGTEQETQTLTIYTPVYLHILEEVFSILNREFFGGLKEIWI 1211

RESULT 4
US-11-060-008-11
; Sequence 11, Application US/11060008
; Publication No. US20050257290A1
; GENERAL INFORMATION:
; APPLICANT: Kloeck, Andrew P.
; APPLICANT: Williams, Deryck J.
; APPLICANT: McLaird, Merry B.
; APPLICANT: Bradley, John D.
; APPLICANT: Davila-Aponte, Jennifer A.
; APPLICANT: Xu, Siqun
; APPLICANT: Frevert, Anita M.
; TITLE OF INVENTION: NEMATODE FATTY ACID DESATURASE-LIKE
; FILE REFERENCE: 12557-007001
; CURRENT APPLICATION NUMBER: US/11/060,008
; CURRENT FILING DATE: 2005-02-17
; PRIOR FILING DATE: US/10/243,468
; PRIOR FILING DATE: 2002-09-13
; PRIOR APPLICATION NUMBER: US 60/322,003
; PRIOR FILING DATE: 2001-09-13
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 389
; TYPE: PRT
; ORGANISM: Heterodera glycines
US-11-060-008-11

Query Match 5.0%; Score 82; DB 7; Length 389;
Best Local Similarity 19.7%; Pred. No. 0.56;
Matches 37; Conservative 30; Mismatches 63; Indels 58; Gaps 7;

QY 53 LFLVPLFQSLS-----STTSHIS-----FKDAFLGLIIPGYAALP-----NP 92
Db 132 LLMPFEPWQKSHRQHHQFTSHVDKDKGHPWLEDDYEGGWLKHKHFAKIPLSGLIRWNP 191
QY 93 -----WQPSQFVKDLTKCVAMLLTLYCGPVLDPVLYHLNPKSSILEDYFHE 139
Db 192 IYTVAGLPGDSHPFSPFSLPSNTERFKCLISSSLCLITSWAIFVLLDHP-----242
QY 140 FLNWSRNFIFAPITEEIFYTSMLLTLYNLNLIPLHSQLSYQQLFW-----QPSLF 189

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Db 140 RVAALIPGSLVSLADRMWSEVFVITSLFMLPGLMLTLFLAHE-----PVL 186
Qy 214 LTTCPQIILYTLFGGLTKFVVRTGGLNWCCLILHALCNMG-----FPGPSRLNLHFT 267
Db 187 PPSVPKTLKQTVVEPFKEF-FMRKGIASAVCVLLFIFLYKLGDNSMATALATPFYLDMGFS 245
Qy 268 VVDKAGRISKLVSW-----NKCVF-----ALLVLGLISLK----- 299
Db 246 KTD--IGLIKAGLWPAVAGILGGVWMLKIGVKNKALWLFAGVQAVITLVFVWLAGPGH 303
Qy 300 -DTLQTLVGTGTYRITL 315
Db 304 FDT-----VGT-GERLML 315

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RESULT 11
US-10-821-234-1478
; Sequence 1478, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Stache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821,234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pt_seq_genes Version 1.0
; SEQ ID NO 1478
; LENGTH: 113
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-234-1478

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Query Match 4.7%; Score 77; DB 6; Length 113;
Best Local Similarity 23.2%; Pred. No. 0.39;
Matches 32; Conservative 21; Mismatches 47; Indels 38; Gaps 6;

Qy 42 MQLTIMLISNLFVLPFLOSLSSTTSHSPKDAFLGLGIIPGY---YAALPNWQFSQ 97
Db 1 MSASVSVISR-----FLEEYLSSTPQRKLDVALLYLGTALQFGYLLVGTFFPNS 55

Qy 98 FVKDLTKCVAMLLTYLTCGVPDLFVLYHLINPKSSILEDFYHEFLNI---WSFRNFIAPFI 154
Db 56 FLSGFISCVGSPILAVC-----LRQINPONKA-----DFQGISPERAFADFLFA-- 100

Qy 155 TEEIFYTSMLTYLNL 172
Db 101 -----STILHLV 107

```

```

RESULT 12
US-10-793-626-1516
; Sequence 1516, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PUS3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1516
; LENGTH: 453
; TYPE: PRT
; ORGANISM: Artificial Sequence

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; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-1516

Query Match 4.7%; Score 77; DB 6; Length 453;
Best Local Similarity 21.6%; Pred. No. 2;
Matches 61; Conservative 38; Mismatches 94; Indels 90; Gaps 12;

Qy 62 QLSSTTHSHFKAFLGIGIIPGYAALPN-----PWQSQFVKDLTKCVAMLLTYLTCG 115
Db 74 EISSRSKIYGLFTIGLYLVIGPFALPLATTSFIAFSPFISSGT--AQALLPIF-- 129
Qy 116 PVLDFVLYHLINPKSSILEDFYHEFLN-----IWSFRNFIAPITEEIFY 160
Db 130 SILFFGVANLFSRKPDKILDIYIGKFLNPVLLIGIVVLAIFRPMGGISHAPVSAD-YS 188
Qy 161 TSMLLTYLNLIPHQSLSYQOLFQWPSLFFGLAHAH-----AYEQLOEGSMT 208
Db 189 NSVLKGFID-----GYNTDALASLAFGLIIVTTIKKLGITNPNTIAKETLKS----- 238
Qy 209 TVSILLTCTQIILYT--TLFG--GLTKFVVRTGGLNWCCLILHALCNMGFPGPSRLNL 264
Db 239 TISII---AMGVIYTLALMGTMSLGRFKVSENGGIALAQIAQHYLGD----- 283
Qy 265 HFTVVDKKAGRISKLVSIWNKCYFALLVLGLISLKDITLQTLVG 307
Db 284 -----YGIILSLIIVACLKTAIG 303

```

```

RESULT 13
US-10-793-626-654
; Sequence 654, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PUS3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 654
; LENGTH: 295
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-654

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Query Match 4.6%; Score 76; DB 6; Length 295;
Best Local Similarity 19.8%; Pred. No. 1.5;
Matches 34; Conservative 44; Mismatches 70; Indels 24; Gaps 8;

Qy 149 FIFAPITEEIPYTSMLTYLNL-IPHSQLSYQO-----LFWQPSLFFGLAHAHAYEQLO 203
Db 97 FVLSDFVPHLVHFTTDLHIPFVNFDP--LSFAYVIFVIFWQO---VGFSAVNLTDGL- 148
Qy 204 EGSMTYSILLTTCFQIILYTLFGGLTKFVVRTGGLNWCCLILHALCNMGFP--GPSRL 262
Db 149 DGLATGSLIIGFAMYAVN-----SYMLDSFAGIFCIIMFALLGFIPLYNLPKV 199
Qy 263 NLHFTVVDKKAGRISKLVSIWNKCYFALLVLGLISLKDITLQTLVGTGYRIT 314
Db 200 FMGDT-GSLALGGIFATISIMLNQELSLILIGFVVFVETLSVMQLQVASYKLT 250

RESULT 14
US-11-000-463-240
; Sequence 240, Application US/11000463

```

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; Publication No. US20050266423A1
; GENERAL INFORMATION:
; APPLICANT: Tang, Y Tom
; APPLICANT: Liu, Chenghua
; APPLICANT: Asundi, Vinod
; APPLICANT: Chen, Rui-hong
; APPLICANT: Qian, Xiaohong B.
; APPLICANT: Wang, Zhiwei
; APPLICANT: Wehrman, Tom
; APPLICANT: Zhang, Jie
; APPLICANT: Zhou, Ping
; APPLICANT: Cao, Yi-Cheng
; APPLICANT: Dmanac, Radoje T.
; TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides
; FILE REFERENCE: 785C1P4CN
; CURRENT APPLICATION NUMBER: US/11/000,463
; PRIOR FILING DATE: 2004-11-29
; CURRENT FILING DATE: 2004-11-29
; PRIOR FILING DATE: 10/291,265
; PRIOR FILING DATE: 2002-11-08
; PRIOR APPLICATION NUMBER: PCT/US01/02623
; PRIOR FILING DATE: 2001-01-25
; PRIOR APPLICATION NUMBER: 09/922,279
; PRIOR FILING DATE: 2001-08-03
; PRIOR APPLICATION NUMBER: 09/491,404
; PRIOR FILING DATE: 2000-01-25
; PRIOR APPLICATION NUMBER: 09/617,746
; PRIOR FILING DATE: 2000-07-17
; PRIOR APPLICATION NUMBER: 09/631,451
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: 09/633,870
; PRIOR FILING DATE: 2000-09-15
; NUMBER OF SEQ ID NOS: 944
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 240
; LENGTH: 554
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-000-463-240

Query Match      4.6%; Score 76; DB 7; Length 554;
Best Local Similarity 22.1%; Pred. No. 3.2;
Matches 52; Conservative 30; Mismatches 89; Indels 64; Gaps 9;

Qy 36 RTIKSRMOKLTIMLSNLFLVPLQSLSTSHISFKD-AFLGLGIIPGYAALPNWQ 94
Db 190 RLUTNTME--TVLITIALFYPLEGSKSMNSVKYSSLVAF----IIRPTAVILWTPLL 243
Qy 95 FSQFVKDLTKCVAMLLTYCGPVLDFVLVHLNLP-----LTLHLHFLPVGVFTLSLMDRIDRIFPGQWTLVQNF 290
Db 244 FRHFCQEPK-----LDLILHFLPVGVFTLSLMDRIDRIFPGQWTLVQNF 290
Qy 129 -KSSILED---FYHEFINWSFRN-----FIFAPITEEIFYTSMLTTVNLII 172
Db 291 LKFNVLQNWGTGYGSHPHWYFSGGFVILGTHLPFIHGCYLAKPKRYRILLVTVLWTL 350
Qy 173 PHQSLSQOQL-FWQPSLFPGLAHAAHAYEQIQSGMTTWSIL-LTTCFQILYTTL 225
Db 351 VYSMLSHKEFRFTYPLVPCFVCGYSLTHTLTKWKPKALSFLLSNLFLALYTG 405

RESULT 15
US-11-186-284-12
; Sequence 12, Application US/11186284
; Publication No. US20050266493A1
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals, Inc.
; APPLICANT: Berger, Allison
; APPLICANT: Guillemette, Tracy L.
; APPLICANT: Kamatkar, Shubhangi
; APPLICANT: Schlegel, Robert
; APPLICANT: Monahan, John E.
; APPLICANT: Thibodeau, Stephen N.
; APPLICANT: Burgart, Lawrence J.

```

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; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
; TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND
; TITLE OF INVENTION: THERAPY OF COLON CANCER
; FILE REFERENCE: MPM01-029P2RNM
; CURRENT APPLICATION NUMBER: US/11/186,284
; CURRENT FILING DATE: 2005-07-21
; PRIOR APPLICATION NUMBER: US/10/301,822
; PRIOR FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US 60/339,971
; PRIOR FILING DATE: 2001-12-10
; PRIOR APPLICATION NUMBER: US 60/361,978
; PRIOR FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 60/381,988
; PRIOR FILING DATE: 2002-05-20
; NUMBER OF SEQ ID NOS: 228
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 459
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-11-186-284-12

Query Match      4.5%; Score 75; DB 7; Length 459;
Best Local Similarity 28.1%; Pred. No. 3.2;
Matches 47; Conservative 14; Mismatches 50; Indels 56; Gaps 10;

Qy 198 AYEQL-----QEGSMTTV-----SILLTTCFOILYTLFGGLTKFVFTGGLNWC 244
Db 288 AYEQLLSRLLEETAEGETQVPGDLISALLPSDFS-RYFQYEGSLTTPPCAQ--GVITV 344
Qy 245 I-----ILHALCNIMGFPGSRNLNHTVVDKAGRI-----SKLV 280
Db 345 FNQTVMLSAKQLHTLSDTLWGGDSRLQINFRATQPLNGRVIEASFAGVDSPPRAEPV 404
Qy 281 SIWNKCYFA---LLVLGLISLKTOTLV-----GTPG---YR 312
Db 405 QL-NSCLAAAGDILALVFGLLFAVTSVAFVQMRQRHRRGTGGVSYSR 450

Search completed: December 9, 2005, 03:14:19
Job time : 7.15234 secs

```

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2005, 03:02:35 ; Search time 8.84766 Seconds
(without alignments)
285.923 Million cell updates/sec

Title: US-09-165-460A-2
Perfect score: 2342
Sequence: 1 MFDLKTILDHNPWKLIIS.....HPTLAERSTALDYVSEKKN 453

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 32527 seqs, 5584426 residues

Total number of hits satisfying chosen parameters: 32527

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA New:*
1: /cgn2_6/ptodata/1/pubaa/US09_NEW_PUB pep.*
2: /cgn2_6/ptodata/1/pubaa/US06_NEW_PUB pep.*
3: /cgn2_6/ptodata/1/pubaa/US07_NEW_PUB pep.*
4: /cgn2_6/ptodata/1/pubaa/US08_NEW_PUB pep.*
5: /cgn2_6/ptodata/1/pubaa/PCT_NEW_PUB pep.*
6: /cgn2_6/ptodata/1/pubaa/US10_NEW_PUB pep.*
7: /cgn2_6/ptodata/1/pubaa/US11_NEW_PUB pep.*
8: /cgn2_6/ptodata/1/pubaa/US60_NEW_PUB pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2336	99.7	472	7	US-11-008-331-3
2	903	38.6	474	7	US-11-008-331-4
3	328	14.0	426	7	US-11-008-331-2
4	148.5	6.3	279	6	US-10-467-657-3232
5	147.5	6.3	283	7	US-11-008-331-6
6	104	4.4	298	7	US-11-074-176-6
7	93	4.0	377	6	US-10-821-234-1436
8	92	3.9	414	6	US-10-793-626-806
9	91	3.9	339	6	US-10-793-626-1694
10	91	3.9	648	6	US-10-793-626-1060
11	90	3.8	426	6	US-10-131-826A-218
12	88.5	3.8	215	7	US-11-008-331-5
13	86	3.7	941	6	US-10-131-826A-464
14	85	3.6	213	6	US-10-793-626-1096
15	83	3.5	250	6	US-10-793-626-1124
16	83	3.5	376	6	US-10-793-626-418
17	83	3.5	376	6	US-10-793-626-2260
18	82	3.5	484	7	US-11-102-240-78
19	80.5	3.4	228	6	US-10-467-657-568
20	80.5	3.4	228	6	US-10-467-657-4838
21	80.5	3.4	386	7	US-11-055-822-586
22	80.5	3.4	2644	6	US-10-770-726-45
23	79.5	3.4	364	6	US-10-793-626-2626
24	79.5	3.4	817	7	US-11-012-762-2
25	78.5	3.4	387	6	US-10-793-626-3180

ALIGNMENTS

RESULT 1
US-11-008-331-3
; Sequence 3, Application US/11008331
; Publication No. US20050244925A1
; GENERAL INFORMATION:
; APPLICANT: Genencor International, Inc.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: G3386-PCT
; CURRENT APPLICATION NUMBER: US/11/008,331
; CURRENT FILING DATE: 2004-12-08
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 472
; TYPE: PRT
; ORGANISM: S. cerevisiae
; US-11-008-331-3

Query Match 99.7%; Score 2336; DB 7; Length 472;
Best Local Similarity 99.8%; Pred. No. 8.7e-188;
Matches 452; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy	1	MFDLKTILDHNPWKLIISGFSIAQFSFYSILTYROYQKLSKLPVLEDEIDDETFH	60
Db	1	MFDLKTILDHNPWKLIISGFSIAQFSFYSILTYROYQKLSKLPVLEDEIDDETFH	60
Qy	61	KSRNYSRAKAFSIFGVDYNLAQKLVFIKYDLFPKIHMAVSLNNAVLVPRFHMVSTVAQ	120
Db	61	KSRNYSRAKAFSIFGVDYNLAQKLVFIKYDLFPKIHMAVSLNNAVLVPRFHMVSTVAQ	120
Qy	121	SLCFLGLSSLSLTVLDPLSYSHFVLEKFGFNKLTVMITDMIKSLTAYAGGPIL	180
Db	121	SLCFLGLSSLSLTVLDPLSYSHFVLEKFGFNKLTVMITDMIKSLTAYAGGPIL	180
Qy	181	YLFUKIPDKPPTDFLWYIMVFLFVQILAMTIIIPVFMPEMKNKFTPLDGLKKKSIESLA	240
Db	181	YLFUKIPDKPPTDFLWYIMVFLFVQILAMTIIIPVFMPEMKNKFTPLDGLKKKSIESLA	240
Qy	241	DRVGFPDLDKIFVLDGSKRSHSNAYFTGLPPTSKRIVLFDTLVNSNSTDEITAVLAHIG	300
Db	241	DRVGFPDLDKIFVLDGSKRSHSNAYFTGLPPTSKRIVLFDTLVNSNSTDEITAVLAHIG	300
Qy	301	HWQKNHIVNMVIFSQLHTFLIFSLFTSYRNTSFYNTGFFLEKSTGSGFVDPVITKEPPI	360
Db	301	HWQKNHIVNMVIFSQLHTFLIFSLFTSYRNTSFYNTGFFLEKSTGSGFVDPVITKEPPI	360

Sequence 718, App
Sequence 253, App
Sequence 290, App
Sequence 1212, Ap
Sequence 288, App
Sequence 1512, Ap
Sequence 8, Appli
Sequence 6, Appli
Sequence 60, Appli
Sequence 2, Appli
Sequence 48, Appli
Sequence 8, Appli
Sequence 49, Appli
Sequence 298, App
Sequence 3116, Ap
Sequence 860, App
Sequence 6, Appli
Sequence 2, Appli
Sequence 1858, Ap
Sequence 24, Appli

```

QY 361 IIGFMLFNDLTPLECAMQVMSLSRTHYQADAYAKKGLYKQNLCRALIDLQIKNLST 420
Db 361 IIGFMLFNDLTPLECAMQVMSLSRTHYQADAYAKKGLYKQNLCRALIDLQIKNLST 420

QY 421 MNVDPLYSSHYSHPTLAERSTALDVSSEKKKN 453
Db 421 MNVDPLYSSHYSHPTLAERSTALDVSSEKKKN 453

RESULT 2
US-11-008-331-4
; Sequence 4, Application US/11008331
; Publication No. US20050244925A1
; GENERAL INFORMATION:
; APPLICANT: Genencor International, Inc.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: GC386-PCT
; CURRENT APPLICATION NUMBER: US/11/008,331
; CURRENT FILING DATE: 2004-12-08
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 474
; TYPE: PRT
; ORGANISM: Schizosaccharomyces pombe
US-11-008-331-4

Query Match 38.6%; Score 903; DB 7; Length 474;
Best Local Similarity 40.4%; Pred. No. 2.4e-68;
Matches 184; Conservative 96; Mismatches 153; Indels 22; Gaps 6;

QY 4 LKTLDPHPNIPWKLIIISGFSIAQFSPESLYTYQYOKLSETKLPVLEDEIDDETHFKR 63
Db 37 LMHILDPGPPWIKVIAGFSIGKYAWDLYLRRQVPVLLREKPPAILAEHVDEKKYQAL 96

QY 64 NYSRAKAFSIFGDVNVLAQKLVFIKYDLFPKJWHNA----VSLNAVLPVRFHMVSTVA 119
Db 97 SYARDKSWFSTIVSTFTLAVDLIIIKYDGLSYLWNITKPPMDKL-AASSRSFSLSTSIT 155

QY 120 QSLCFLGLSSSLTLVDPLSYSHFVLEBKFGFNKLTVOLMTDMIKSLTLAYALGGPI 179
Db 156 HSCVFEGTLFRLQIQPNLSTFVIEBKFGFNKSLKIFVIDLLKSLGGLMSVV 215

QY 180 LYLFKLIFDKPPTDFLWYIMVFLVQILAWTIIPVIMPENKFTPLEDEGELKKISL 239
Db 216 VGVFVKILTRFGDNFMYAWGAVIVGLIQLTIAPSLIMPLFYKFTPLENGSLRTQIEEL 275

QY 240 ADRVGPDLKIFVIDGSKRSSHNAVFTGLPFTSKRVLFDTLVNSNSTDEITAVLAHEI 299
Db 276 AASINPPLKLYVIDASRRSTHNAFPYGLPW-NKGIVLFDTLVKNHTEPELIAILGHEL 334

QY 300 GHQKQH-IYVMVIFSOHLTFLIFSLTSTYRNTSFYNTFGFLEKSTGSGFVDPVITKEF 358
Db 335 GHYMSNHLNTIDYKMSLFHLF-LPAAFIRNLSLYTSFNITEK----- 379

QY 359 PIIGFMLFNDLTPLECAMQVMSLSRTHYQADAYAKKGLYKQNLCRALIDLQIKNL 418
Db 380 PVIVGLLLFSDALGPLSSILTFASNKVSRUCEYOADAFAKQGVAKQDGLGDIRIHDDNL 439

QY 419 STMNVDPLYSSHYSHPTLAERSTALDVSSEKKKN 453
Db 440 SPLEFDSLTSYSHSHPIVDRLNAIDYTLTKRNN 474

RESULT 3
US-11-008-331-2
; Sequence 2, Application US/11008331
; Publication No. US20050244925A1
; GENERAL INFORMATION:
; APPLICANT: Genencor International, Inc.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms

```

```

; FILE REFERENCE: GC386-PCT
; CURRENT APPLICATION NUMBER: US/11/008,331
; CURRENT FILING DATE: 2004-12-08
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 426
; TYPE: PRT
; ORGANISM: Bacillus subtilis
US-11-008-331-2

Query Match 14.0%; Score 328; DB 7; Length 426;
Best Local Similarity 26.9%; Pred. No. 1.8e-20;
Matches 108; Conservative 76; Mismatches 152; Indels 66; Gaps 14;

QY 81 LAQKLVFIKYDLF----PKIMHMAVSL-----NAVLPVRFHMVSTVAQSLCF 124
Db 53 VAEQYSNVKNFLFFIGVPLDWFLFFVLLVSGVSKKIKKWEAAVPRF-----LQTVGF 106

QY 125 LGLSSLSLTVLPLSYSHFVLEBKFGFNKLTVOLMTDMIKSLTLAYAGG---PILY 181
Db 107 VEVLSLITTLVTLPLDWIGYQVSLD-YNISTQTATASWAKDQVISEWISFPITLCLVLFY 165

QY 182 LFLKIFDKPPTDFLWYIMV---FLFVVOILAWTIIPVIMPENKFTPLEDEGELKKIS 237
Db 166 WLKRRHKRWLYAWLLTVPPSLFLFFIQ-----PVIIDPLYNDYFPLKKELESKIL 218

QY 238 SLADRVGPPLDKIFVIDGSKRSSHNAVFTGLPFTSKRVLFDTLVNSNSTDEITAVLAH 297
Db 219 ELADEANIPADHVYEVNWKSEKTNALNAVYTGIG-ANKRVLWDTLTLNKLDLDDSEILFMGH 277

QY 298 EIGHQWQHINVMVIFSOHLTFLIFSL-----FTSIYRNTSFYNTFGFLEKSTGSGFVDP 352
Db 278 EMGHVYMKH-----VYIGLAGYLLVSLAGFYVIDKLYKRTVRLTRSMFHLGRHDLAALP 332

QY 353 VITKFPPIIGFMLFNDLTPLECAMQVMSLSRTHYQADAYAKKL-GYKQNLCRALI 411
Db 333 L-----LULLFSVLSPAVTFPSNA-----VSRYOENKADQYGIELTENREAAVKTQ 379

QY 412 DLQIKNLSTMNVDPLYSSHYSHPTLAERSTALDVSSEKKKN 453
Db 380 DLAVTCLSQVDPVLVKIFRGSHPSIMERIQH-----AEKEEN 417

RESULT 4
US-10-467-657-3232
; Sequence 3232, Application US/10467657
; Publication No. US20050260581A1
; GENERAL INFORMATION:
; APPLICANT: CHIRON SPA
; APPLICANT: FONTANA Maria Rita
; APPLICANT: PIZZA Mariagrazia
; APPLICANT: MASIGNANI Vega
; APPLICANT: MONACI Elisabetta
; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/467,657
; CURRENT FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: GB-0103424.8
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 9218
; SOFTWARE: SeqWin99, version 1.04
; SEQ ID NO 3232
; LENGTH: 279
; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-3232

Query Match 6.3%; Score 148.5; DB 6; Length 279;
Best Local Similarity 25.7%; Pred. No. 9.4e-06;
Matches 59; Conservative 42; Mismatches 88; Indels 41; Gaps 10;

```

```
QY 228 EDGELKKSIESLADRVGPPDKIFVIDGSKSSHSNAYFTGLPTSKRIVLFDLTVNSNS 287
Db 75 EEAMLLNTVEAQRQWNLKTEVAIY-----HSPENAFATGASRNSSLIIVSTGLDHTM 130
QY 288 TDEITAVLAHEIGHQWKNHVNW-VIFSQHTFLIFSLFTSIYRNTSYFNTFGFLEKST 346
Db 131 RDEEAVLAHEMAHVGNGDMVTLIQGVNFTVVF--LSRIIANLIARNNDG---SQSQ 185
QY 347 GSFVDPVITKEPFIIGMFLNDLLTPLECAMQFVMSLISRTHEYQADAYAKKLYGKQNL 406
Db 186 GTYF--LVSMVFOILFGSL-----ASLIVMWFQRQREYRDAGAAKLVGAPKM 231
QY 407 CRAL-----IDLQIKNLSTMNW-----DPLSYSHYSHPTLAERSTAL 444
Db 232 ISALQRLKGNPVDLP-EEWNAWGIAGTRDRLS-----THPSLONRIARL 276
```

RESULT 5

```
US-11-008-331-6
; Sequence 6, Application US/11008331
; Publication No. US20050244925A1
; GENERAL INFORMATION:
; APPLICANT: Genencor International, Inc.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: GC386-PCT
; CURRENT APPLICATION NUMBER: US/11/008,331
; CURRENT FILING DATE: 2004-12-08
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 283
; TYPE: PRT
; ORGANISM: Haemophilis influenza
US-11-008-331-6
```

```
Query Match 6.3%; Score 147.5; DB 7; Length 283;
Best Local Similarity 26.5%; Pred. No. 1.2e-05;
Matches 73; Conservative 42; Mismatches 101; Indels 59; Gaps 12;
```

```
QY 198 IMVFLFVQILAMTIIPIFIMPENKFTPLE--DGE-----LKKIESLADRV 243
Db 37 INALLFG---FAGSIISLFL-----SKTALRSVDGEVITQPNOQTERWLDITVSRQAOKA 89
QY 244 GPLDKIFVIDGSKSSHSNAYFTGLPTSKRIVLFDLTVNSNSTDEITAVLAHEIGHQW 303
Db 90 GIPMPDVAIY-----HSPDVNAFATGATKNSLSVAVSTGLNNMTAEAEAVLAHEISHIS 145
QY 304 KNHIVNMVIF-SQHTFLIF-----SLFTSIYRNTSYFNTFGFLEKSTGSPVDPIVTK 357
Db 146 NGDMVTMALQGVNLTFTVIFLSRVATAVASSRNNGBT-----RSSGIYFLVSMVLE 199
QY 358 FPIIGFMFLNDLLTPLECAMQFVMSLISRTHEYQADAYAKKLYGKQNLCLALIDQ--- 414
Db 200 -----MLFGVLASII--AMWF-----SRVEFRADAGASLVGKEXKIMALQRLQOLH 245
QY 415 -----IKNLSTMNWVDPLXSYSHYSHPTLAERSTAL 444
Db 246 EPONLEGLSNAPMNGKRSSELPWSPPLEKRIEAL 280
```

RESULT 6

```
US-11-074-176-6
; Sequence 6, Application US/11074176
; Publication No. US20050250135A1
; GENERAL INFORMATION:
; APPLICANT: Klaenhammer, Todd R.
; APPLICANT: Russell, William M.
; APPLICANT: Altermann, Eric
; APPLICANT: McAuliffe, Olivia
; APPLICANT: Ferill, Andrea Azcarate
```

```
; TITLE OF INVENTION: Nucleic Acid Sequences Encoding
; TITLE OF INVENTION: Stress-Related Proteins and Uses Therefore
; FILE REFERENCE: 5051-694
; CURRENT APPLICATION NUMBER: US/11/074,176
; CURRENT FILING DATE: 2005-03-07
; PRIOR APPLICATION NUMBER: 60/551,161
; PRIOR FILING DATE: 2004-03-08
; NUMBER OF SEQ ID NOS: 381
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Lactobacillus acidophilus
US-11-074-176-6
```

```
Query Match 4.4%; Score 104; DB 7; Length 298;
Best Local Similarity 20.8%; Pred. No. 0.052;
Matches 70; Conservative 60; Mismatches 134; Indels 72; Gaps 16;
```

```
QY 146 VLEEKFGFNKLTVOLWITDMIKSLTAYAGCPILYLFKIFDKFPTDFLWYIMVFLF-- 203
Db 1 MLYQOIARNKRKKTALINVLFVWILT---VGAGLGILF-----SNSPWTGIILAG 49
QY 204 -VVOILAMTIIPIFIMPENKFTPLEDG---ELKKSIESLADRVGPPDKIFVIDGSKRS 259
Db 50 SLIYLLIMQWQNPANMIMSLNHAQIQEADNPDELWHIVEDMAMVARVPMRVFIIP----D 105
QY 260 SHSNAYFTGLPTSKRIVLFDLTVNSNSTDEITAVLAHEIGHQWKNHIVNMVIFSOLHTF 319
Db 106 PSPNAFATGRDPEHSAVAVTQGILELMNRELEGVLGHEL-----SHRVYDILLSTIGV 160
QY 320 LIFSLETSIYRNTSYFNTFGFF-----LEKSTGSPVDPIVTKFPIIIGFMFLNDLLT 372
Db 161 VLVGVISFISIASRY--IWFFGGRDRDDEDRTNAP--EILFKVIAIV--FVL---ILG 211
QY 373 PLECAMQFVMSLISRTHEYQADAYAKKLYGK-QNLCLAL-----IDLQI 415
Db 212 PISASL--AQWALSREYLDASSVELTRNPQGLISALRKIEGSPQMRQADRSSAGLYI 269
QY 416 KNLSTMNVDPLY-----SSYHSHPTLAERSTALDYV 447
Db 270 EN-----PPHNHGLSHLFDTHPPPTEDRIKRLHEM 298
```

RESULT 7

```
US-10-821-234-1436
; Sequence 1436, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Stache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821,234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pt SEQ_genes Version 1.0
; SEQ ID NO 1436
; LENGTH: 377
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-234-1436
```

```
Query Match 4.0%; Score 93; DB 6; Length 377;
Best Local Similarity 21.5%; Pred. No. 0.59;
Matches 72; Conservative 44; Mismatches 101; Indels 118; Gaps 16;
QY 103 LINAVLPVRFHNVSTVAOSLCFLGLSSLSLTVLDPLSYSHFVLEKFGFNKLTVLQWLI 162
```

```
Db 40 LLWALLPIFFGALRSVR-----CARGKNAS----- 64
QY 163 TMIKSLTLAYAGGPI-----LYFLKIFDKPTDFLWYIMVFLFVVOILAMTIIP 214
Db 65 -DMPETITSRDAARFPIIASCTLLGLYLFKIFSQEYINLL--LSMYFFVLGLALSHT- 120
QY 215 VETMPMFNFTPLEDGEKLSIESLADRVGFPDLKIFVIDGSKRSHSNAYFTGLPFTSK 274
Db 121 --ISPPMKNFPP-----ASFP-NROYQLLFTQSGENKEEINVEFDTK 161
QY 275 RIVLFDTLVNSNSTBITAVLAHEIGHQKNHI-----VNMVIFSQHLT--FLIFS 323
Db 162 DLVCL-----GLSIVGVWYLLRKHWIANNLFGLAFLSGLNGVELLHNNVSTGCILGG 214
QY 324 LFTSIYRNTSFYNTGFFLEKSTGSGVDVITK--BFPILIGP-----ML 366
Db 215 LF-----IYDVFWVF-----GTVMVTVAKFFEAPIKLVFPDQDLEKLEANNFAML 261
QY 367 -FNDLLTP---LECAMQFVMSLSIRTHEYOADAYA 397
Db 262 GLGDVVIPIGIFALLURFDISLKKNTHTYFYSFA 296

RESULT 8
US-10-793-626-806
; Sequence 806, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 806
; TYPE: PRT
; LENGTH: 414
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-806

Query Match 3.9%; Score 92; DB 6; Length 414;
Best Local Similarity 23.0%; Pred. No. 0.8;
Matches 72; Conservative 46; Mismatches 103; Indels 92; Gaps 15;

QY 96 IWHMAY-----SLLNAVLPVRPHMVSTVAQSLCFLGLSSLSLTVLDPLSYSHFVLE 148
Db 75 IWRILVVTGLRGQBSKNKVLFGLTISIL---IAFGGLAFNIGNIAGAGLGNAMFGLD 131
QY 149 EKEGFNKLTVQLMTDMIKSLTLAYAGGPIVLFL-----KIPDKFPTDFLWYIMVFLF 203
Db 132 VKWG-----AAITAIFAI-----LIFVRSRQKIMD-----VISMLG 164
QY 204 VVOILAMTIIPVFIMP-----MFNKFPTPLEDGEKLSIESLADRVGFPPLDKIFVIDGSKR 258
Db 165 IVMLLVAVYVMVSNPYGQDALVHTFAPEHPFKLILPIITL---VGVTVGGYITFAGAHR 221
QY 259 SSHS-----NAYFTGLPFTSK-----RIVLF-----DTLVNSNSTDEITAVL 295
Db 222 ILDSGIRKGSY---LFPVNSAVAGILTTGVMRTLLFLAVLGVVVTGVTLSSENPPASVF 278
QY 296 AHEIGHQKHHVNMVIFSQHLTFLIFSFTSIYRNTSFYNTGFFLEKSTGSGVDVIT 355
Db 279 QHAUGPIGKN-IFGVVIFAAAMSSVIGSAYTSA-----TFLKTLHKS-----LLN 322
QY 356 KEFPIIIGFMLFN 368
Db 323 KNNLIVITFVIS 335
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RESULT 9

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US-10-793-626-1694
; Sequence 1694, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 1694
; LENGTH: 339
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-1694

Query Match 3.9%; Score 91; DB 6; Length 339;
Best Local Similarity 20.6%; Pred. No. 0.75;
Matches 70; Conservative 52; Mismatches 107; Indels 110; Gaps 17;

QY 78 VYNLAQKLV-----FIKYDLFP-----KIMHMAVSLNNAVLPVRPHMVSTVAQSL- 122
Db 12 IVKLSQMVIVFILITITFILMKLSGPNPVDKILHLDIS-----HVSNEQIETTENKLG 65
QY 123 ----CFLGLLSLSLTL--VDPLSY-SHFVLEKFGFNKLTQVLQWITDMIKSLTLAYAI 175
Db 66 LNNPIFIQWDLNQLFHFDLGTSTQSEPVIREIANVYLGPTLIITFTGLIVSLVISIPL 125
QY 176 GGPILYVLFKIFDK-----FPTDFLWYIMVFLFVVOILAMTIIPV-----F 216
Db 126 GIIAAVYHKIWDRIIRVMTLSVSLPFFIGLILLYIF---SLKNIILPTSDGEGFVS 182
QY 217 IMPFMNKFPTLEDGELKKSIESLADRVGFPPLDKIF-----VIDGSKRSHSNAYFTGLP 270
Db 183 ILPI-----ITWSIGMCAYVIRFSTLLEQYQTPIVESSR-----LRGMP 223
QY 271 FTSKRIVLFDTLVNSNSTDEITAVLAHEIGHQKHHVNMVIFSQHLTFLIFS- 328
Db 224 ---ERYILFQDILKPTIL-PIIPLIGLSIG-----SLIGGTVV 257
QY 329 YRNTSFYNTGFFLEKSTGSGVDVITKEFPIIIGFMLF 367
Db 258 IENLFDIPGLGYFL-----VDSIKSRDYPVIOGCVL 289

RESULT 10
US-10-793-626-1060
; Sequence 1060, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 1060
; LENGTH: 648
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
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Qy 300 CHWQKNHIVNMVIPSQHLTFL-IFSLFTSIYRNTSFYNTFG 339
Db 176 ---QFLTQNYGLGSTIALFLIIFMAFLLIITKSSNGKG 213

RESULT 15

US-10-793-626-1124
; Sequence 1124, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PUJ480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1124
; LENGTH: 250
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-1124

Query Match 3.5%; Score 83; DB 6; Length 250;
Best Local Similarity 19.7%; Pred No. 2.3;
Matches 47; Conservative 35; Mismatches 58; Indels 98; Gaps 11;
Qy 18 IISGFSIAQFSGF-----ESYLYRQYQKLSETKLPVLEDEIDDETFHKSRNYSRAKAKFS 73
Db 60 ILIGFVFVFFFTFLISGIGLLKERTSGTLERLLASPIKSEI----- 100
Qy 74 IFGDV-----YNLAQKLVFIKY-----DLFPKIWH-MAYSLNNAVLPVRFH-MVSTVA 119
Db 101 IFGYVFGYGSFVIGTIYVWVLYAIYILHDLVGSIMFVLLTAILTALVAVTFGILLSTFA 160
Qy 120 QS-----LCFLGLSSLSLTVDLPLSYSHF-----VLEEKFG 152
Db 161 SSEFOMIQIFILVIVPQVLFAGIPIES--MNKGLQYFSHIMPLFYTCQTWQNMIMKGYG 218
Qy 153 FNKLTVLWITDMIKSLTLAVAIGGPILYFLFKIPDKPTDPLWYIMVFLFVVOILAM 210
Db 219 FND-----IVIVLIV-----LPAFFIFLLILNIIGM 244

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OM protein - protein search, using sw model

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Title: US-09-165-460A-2
Perfect score: 2342
Sequence: 1 MFDLKTILDHPNIPWKLIIIS.....HPTLAERSTALDYVSEKKKN 453

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Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA Main:
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2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pcp.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2342	100.0	453	US-10-646-950-2	Sequence 2, Appli
2	2336	99.7	472	US-10-328-459-3	Sequence 3, Appli
3	903	38.6	474	US-10-328-459-4	Sequence 4, Appli
4	855	36.5	424	US-10-210-760A-24	Sequence 24, Appl
5	855	36.5	424	US-10-229-541A-119	Sequence 119, App
6	851	36.3	424	US-10-210-760A-22	Sequence 22, Appl
7	851	36.3	424	US-10-229-541A-117	Sequence 117, App
8	850	36.3	424	US-10-210-760A-30	Sequence 30, Appl
9	850	36.3	424	US-10-229-541A-125	Sequence 125, App
10	849	36.3	424	US-10-210-760A-2	Sequence 2, Appli
11	849	36.3	424	US-10-229-541A-98	Sequence 98, Appl
12	836	35.7	424	US-10-210-760A-15	Sequence 15, Appl
13	836	35.7	424	US-10-229-541A-110	Sequence 110, App
14	836	35.7	424	US-10-424-599-263806	Sequence 263806,
15	833	35.6	424	US-10-210-760A-18	Sequence 18, Appl
16	833	35.6	424	US-10-229-541A-113	Sequence 113, App
17	828	35.4	425	US-10-425-115-201372	Sequence 201372,
18	828	35.4	487	US-10-425-114-42181	Sequence 42181, A
19	819.5	35.0	459	US-10-210-760A-32	Sequence 32, Appl
20	819.5	35.0	459	US-10-229-541A-127	Sequence 127, App
21	761	32.5	400	US-10-210-760A-28	Sequence 28, Appl
22	761	32.5	400	US-10-229-541A-123	Sequence 123, App
23	735	31.4	424	US-10-210-760A-73	Sequence 73, Appl
24	730.5	31.2	451	US-11-097-143-19218	Sequence 19218, A
25	725.5	31.0	329	US-10-210-760A-26	Sequence 26, Appl
26	725.5	31.0	329	US-10-229-541A-121	Sequence 121, App
27	679	29.0	1023	US-10-437-963-136996	Sequence 136996,

28	654	27.9	316	4	US-10-210-760A-34	Sequence 34, Appl
29	654	27.9	316	4	US-10-229-541A-129	Sequence 129, App
30	571.5	24.4	340	3	US-09-925-302-635	Sequence 635, App
31	571.5	24.4	340	3	US-09-925-302-635	Sequence 635, App
32	521.5	22.3	525	4	US-10-210-760A-69	Sequence 69, Appl
33	521.5	22.3	525	4	US-10-229-541A-164	Sequence 164, App
34	459	19.6	407	4	US-10-335-977-5836	Sequence 5836, Ap
35	459	19.6	407	4	US-10-335-977-5837	Sequence 5837, Ap
36	406.5	17.4	447	6	US-11-097-143-19233	Sequence 19233, A
37	372.5	15.9	426	6	US-11-097-143-19248	Sequence 19248, A
38	366.5	15.6	421	4	US-10-282-122A-52166	Sequence 52166, A
39	341.5	14.6	145	4	US-10-424-599-263807	Sequence 263807,
40	328	14.0	426	4	US-10-328-459-2	Sequence 2, Appli
41	326.5	13.9	146	4	US-10-767-701-40070	Sequence 40070, A
42	294.5	12.6	211	4	US-10-425-115-204120	Sequence 204120,
43	274.5	11.7	192	4	US-10-335-977-9682	Sequence 9682, Ap
44	256.5	11.0	102	4	US-10-425-115-201373	Sequence 201373,
45	241.5	10.3	504	6	US-11-097-143-16908	Sequence 16908, A

ALIGNMENTS

RESULT 1
US-10-646-950-2
; Sequence 2, Application US/10646950
; Publication No. US20040072296A1
; GENERAL INFORMATION:
; APPLICANT: Rine, Jasper
; APPLICANT: Boyartchuk, Victor L
; APPLICANT: Ashby, Matthew N
; TITLE OF INVENTION: AFC1 and RCE1: Isoprenylated CAAX Processing Enzymes
; FILE REFERENCE: B96-021-3
; CURRENT APPLICATION NUMBER: US/10/646,950
; CURRENT FILING DATE: 2003-08-21
; PRIOR APPLICATION NUMBER: 60/023,491
; PRIOR FILING DATE: 1996-08-07
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 2
; LENGTH: 453
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-10-646-950-2

Query Match	100.0%	Score	2342;	DB	4;	Length	453;
Best Local Similarity	100.0%	Pred. No.	1.1e-209;	Mismatches	0;	Indels	0;
Matches	453;	Conservative	0;				
Qy	1	MFDLKTILDHPNIPWKLIIISGFSIAQSFESYLTTRQYQKLSYKLPVLEDEIDDETFH	60				
Db	1	MFDLKTILDHPNIPWKLIIISGFSIAQSFESYLTTRQYQKLSYKLPVLEDEIDDETFH	60				
Qy	61	KSRNYSRAKAFSIFGDVYNLAQKLVFIKYDLFPKIMHMAVSLNNAVLPRFHMVSTVAQ	120				
Db	61	KSRNYSRAKAFSIFGDVYNLAQKLVFIKYDLFPKIMHMAVSLNNAVLPRFHMVSTVAQ	120				
Qy	121	SLCFLGLLSLSTLVLDPLSYSHFVLEKEGFKNLTVQLMTDMIKSLTLAYATGGPIL	180				
Db	121	SLCFLGLLSLSTLVLDPLSYSHFVLEKEGFKNLTVQLMTDMIKSLTLAYATGGPIL	180				
Qy	181	YLFELKIPDKPTDFLWYIMVFLFVVOILAMTIIIPVFIIMPENKFTPLDGLKKIESIA	240				
Db	181	YLFELKIPDKPTDFLWYIMVFLFVVOILAMTIIIPVFIIMPENKFTPLDGLKKIESIA	240				
Qy	241	DRVGFPDLKIFVIDGSKSSSHSNAYFTGLPPTSKRIVLFDTLVNSNSTDEITAVLAHEIG	300				
Db	241	DRVGFPDLKIFVIDGSKSSSHSNAYFTGLPPTSKRIVLFDTLVNSNSTDEITAVLAHEIG	300				
Qy	301	HWQKNHIVNMVIFSQLHTFLIFSLFTSIYRNTSYNTGFFLEKSTGSGFVDPVITKEPPI	360				
Db	301	HWQKNHIVNMVIFSQLHTFLIFSLFTSIYRNTSYNTGFFLEKSTGSGFVDPVITKEPPI	360				

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QY 361 IIGFMLFNDLLTPLECAMQVMSLSRTHYQADAVAKKLGKQKNCRALIDLOIKNLST 420
Db 361 IIGFMLFNDLLTPLECAMQVMSLSRTHYQADAVAKKLGKQKNCRALIDLOIKNLST 420
QY 421 MNVDPLYSSHYSHPTLAERSTALDYVSEKKKN 453
Db 421 MNVDPLYSSHYSHPTLAERSTALDYVSEKKKN 453

RESULT 2
US-10-328-459-3
; Sequence 3, Application US/10328459
; Publication No. US20030113895A1
; GENERAL INFORMATION:
; APPLICANT: Genencor International, Inc.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: GC386-PCT
; CURRENT APPLICATION NUMBER: US/10/328,459
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 472
; TYPE: PRT
; ORGANISM: S. cerevisiae
US-10-328-459-3

Query Match 99.7%; Score 2336; DB 4; Length 472;
Best Local Similarity 99.8%; Pred. No. 4.2e-209; Indels 0; Gaps 0;
Matches 452; Conservative 0; Mismatches 1;

QY 1 MFDLKTILDHPNIPWKLIISGFSIAQFSPESYLTYRQYQKLSLTPVLEDEIDDETH 60
Db 1 MFDLKTILDHPNIPWKLIISGFSIAQFSPESYLTYRQYQKLSLTPVLEDEIDDETH 60
QY 61 KSRNYSRAKAFSIFGDVYNLAQKLVFIKYDLPFKIWHMAVSLNNAVLVPRFHMVSTVAQ 120
Db 61 KSRNYSRAKAFSIFGDVYNLAQKLVFIKYDLPFKIWHMAVSLNNAVLVPRFHMVSTVAQ 120
QY 121 SLCLFGLLSLSTLVDLPVLSYSHFVLEEKFGFNKLTQVQWITDMIKSLTLAYAGGPIL 180
Db 121 SLCLFGLLSLSTLVDLPVLSYSHFVLEEKFGFNKLTQVQWITDMIKSLTLAYAGGPIL 180
QY 181 YLFKIFDXKPTDPLWIMVFLFVQILAMTIIIPVFMFMFNKFTPLEDGLKKSIESLA 240
Db 181 YLFKIFDXKPTDPLWIMVFLFVQILAMTIIIPVFMFMFNKFTPLEDGLKKSIESLA 240
QY 241 DRVGFPDLKIFVIDGKRSRSHSNAYFTGLPFTSKRIVLFDTLVNSNSTDEITAVLAHEIG 300
Db 241 DRVGFPDLKIFVIDGKRSRSHSNAYFTGLPFTSKRIVLFDTLVNSNSTDEITAVLAHEIG 300
QY 301 HWQKNHIVNVIQSOLHTFLIFSLTSIYRNTSFYNTFGFFLEKSTGSGFVDPVITKEFPI 360
Db 301 HWQKNHIVNVIQSOLHTFLIFSLTSIYRNTSFYNTFGFFLEKSTGSGFVDPVITKEFPI 360
QY 361 IIGFMLFNDLLTPLECAMQVMSLSRTHYQADAVAKKLGKQKNCRALIDLOIKNLST 420
Db 361 IIGFMLFNDLLTPLECAMQVMSLSRTHYQADAVAKKLGKQKNCRALIDLOIKNLST 420
QY 421 MNVDPLYSSHYSHPTLAERSTALDYVSEKKKN 453
Db 421 MNVDPLYSSHYSHPTLAERSTALDYVSEKKKN 453

RESULT 3
US-10-328-459-4
; Sequence 4, Application US/10328459
; Publication No. US20030113895A1
; GENERAL INFORMATION:
; APPLICANT: Genencor International, Inc.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
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; FILE REFERENCE: GC386-PCT
; CURRENT APPLICATION NUMBER: US/10/328,459
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 474
; TYPE: PRT
; ORGANISM: Schizocaccharomyces pombe
US-10-328-459-4

Query Match 38.6%; Score 903; DB 4; Length 474;
Best Local Similarity 40.4%; Pred. No. 2.7e-75; Indels 22; Gaps 6;
Matches 184; Conservative 96; Mismatches 153;

QY 4 LKTILDHPNIPWKLIISGFSIAQFSPESYLTYRQYQKLSLTPVLEDEIDDETHPKSR 63
Db 37 LMHILDIQFPWKIVIAFGSIGKYAWDLVLRROQVPYLLREKPPALLAEHVDEKYYQKAL 96
QY 64 NYSRAKAFSIFGDVYNLAQKLVFIKYDLPFKIWHMA----VSLNNAVLVPRFHMVSTVA 119
Db 97 SYARDKSNFSTIVSTFTLAVDLLIIKYDGLSYLMNITKPPWMDKL-AASSSRFSLSITSIT 155
QY 120 QSLCLFGLLSLSTLVDLPVLSYSHFVLEEKFGFNKLTQVQWITDMIKSLTLAYAGGPIL 179
Db 156 HSCVFMFGLTFLFSLRIQIPFNLYSTFVIEEKYGFNKRSTLKIIFVILLKLSLGGLLMSVV 215
QY 180 LYLFLKIFDXKPTDPLWIMVFLFVQILAMTIIIPVFMFMFNKFTPLEDGLKKSIESL 239
Db 216 VGVFVKILTKFGDNFIMYAWGAYIVFGLLIQIAPSLIMPLFYKFTPLENGSLRTOIEEL 275
QY 240 ADRVGFPDLKIFVIDGKRSRSHSNAYFTGLPFTSKRIVLFDTLVNSNSTDEITAVLAHEI 299
Db 276 AASINFPKLKLVIDASRRSTHSNAPFYGLPW-NKGIVLFDTLVKNHTEPELIAILGHEL 334
QY 300 GHQKNHIVNVIQSOLHTFLIFSLTSIYRNTSFYNTFGFFLEKSTGSGFVDPVITKEF 358
Db 335 GHYWSHNLIINTIIDYGMSLPHLF-LFAFIRNLSLYTSFNITEK----- 379
QY 359 PIIIGFMLFNDLLTPLECAMQVMSLSRTHYQADAVAKKLGKQKNCRALIDLOIKNL 418
Db 380 PVIUGLLFSDALGPLSSILTFASNKVSRLCEYQADAFKQLGYAKLDGLGDIRIHDDNL 439
QY 419 STMNVDPVLSYSHYSHPTLAERSTALDYVSEKKKN 453
Db 440 SPLEFDSLTSYSHSHPTILVDRINAIDYTTLKNN 474

RESULT 4
US-10-210-760A-24
; Sequence 24, Application US/10210760A
; Publication No. US20030204865A1
; GENERAL INFORMATION:
; APPLICANT: Wan, Jiangxin
; APPLICANT: Huang, Yafan
; APPLICANT: Delina Campbell, Mary-Jane
; APPLICANT: Kuzma, Monika Maria
; APPLICANT: Gilley, Angela Patricia
; TITLE OF INVENTION: Caax prenyl protease nucleic acids and polypeptides and
; FILE REFERENCE: 22542-009
; CURRENT APPLICATION NUMBER: US/10/210,760A
; CURRENT FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
; LENGTH: 424
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; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-10-210-760A-24

Query Match      36.5%; Score 855; DB 4; Length 424;
Best Local Similarity 41.6%; Pred. No. 7e-71;
Matches 184; Conservative 72; Mismatches 162; Indels 24; Gaps 6;

QY 13 IPWKLIISGFSIAQFSPESYLTIRYQYKLSKTLPPVLEDEIDDETFFHKSNNYSRAKAKF 72
Db 3 IPFMETVGVGMIVMYIFETVLDLRLQLTALKLTPTLPTKTLVGVISOEKFESKRSAYSLDKSYF 62
QY 73 SIFGDVNVLAQKLVFIKYDKLPPKIMHMAVSLNNAVLP-VRFHMVSTVAQSLCFLGLLSSL 131
Db 63 HFVHEFVTILMDSAILPFGILPWFWMKS----GAVLPRLGLDPENEILHTLSFLAGVMTW 118
QY 132 STLVDLPLSYSHFVLEKFGFNKLTVLQMTDMIKSLTLAYAGGPIYLVFLKIFDKFP 191
Db 119 SQITDLPSLYSTFVIESRHGFNKTQIWMFIRDMIKGTFLSVILGPPVIAAIIIVQKGG 178
QY 192 TDFLWYIMVFLFVVOILAMTIIPVIMPENKFTPLEDGELKKSIESLADRVGFLDKIF 251
Db 179 PYLAIVLWAFMFLISLVNMTIYPVLIAPLNFKNFTPLPDGDLREKIEKLASSLKFLPKLKF 238
QY 252 VIDGSKRSHSNAYFTGLPFTSKRIVLFDTLVNS-NSTDEITAVLAHEIGHQKNHIVNM 310
Db 239 VVDGSTRSSHNAVMYGF-FKNKRIVLYDTLQOCKNEDEIVAVIAHELGHKLNHTTYS 297
QY 311 VIFSQHLTFLIFSFTSIYRNTSFYNTFGFLEKSTGSDVPVITKEPPIIIGFMLENDL 370
Db 298 FIAVQILAFLOFGGYTLVRNSTDLFRSFGFDTQ-----PVLIGLIIFIQHT 342
QY 371 LTPLECAQMFVMSLISRTHEQADAYAKKLGKYNLCRALIDLOIKNLSTMNVDPLYSY 430
Db 343 VIPLQHLVSGNLVSRAFEQADAFVAKLGYAKDLRALVQLQENLSAMNTDPLYSAY 402
QY 431 HYSHTPLAERSTALDYVSEKKK 452
Db 403 HYSHPPLVERLRAID--GEDKK 422

RESULT 5
US-10-229-541A-119
; Sequence 119, Application US/10229541A
; Publication No. US20040010821A1
; GENERAL INFORMATION:
; APPLICANT: McCourt, Peter
; APPLICANT: Ghassseman, Majid
; APPLICANT: Cutler, Sean
; APPLICANT: Bonetta, Dario
; TITLE OF INVENTION: Stress Tolerance and Delayed Senescence in Plants
; FILE REFERENCE: 22542-007CIP2
; CURRENT APPLICATION NUMBER: US/10/229,541A
; CURRENT FILING DATE: 2002-08-27
; PRIOR APPLICATION NUMBER: 10/160,764
; PRIOR FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: 60/294,766
; PRIOR FILING DATE: 2001-05-31
; PRIOR APPLICATION NUMBER: 60/348,909
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: 10/210,760
; PRIOR FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; PRIOR APPLICATION NUMBER: 09/191,687
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 176
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 119
; LENGTH: 424
; TYPE: PRT

; ORGANISM: Arabidopsis thaliana
US-10-210-760A-22

Query Match      36.3%; Score 851; DB 4; Length 424;
Best Local Similarity 41.4%; Pred. No. 1.6e-70;
Matches 183; Conservative 72; Mismatches 163; Indels 24; Gaps 6;

QY 13 IPWKLIISGFSIAQFSPESYLTIRYQYKLSKTLPPVLEDEIDDETFFHKSNNYSRAKAKF 72
Db 3 IPFMETVGVGMIVMYIFETVLDLRLQLTALKLTPTLPTKTLVGVISOEKFESKRSAYSLDKSYF 62
QY 73 SIFGDVNVLAQKLVFIKYDKLPPKIMHMAVSLNNAVLP-VRFHMVSTVAQSLCFLGLLSSL 131
Db 63 HFVHEFVTILMDSAILPFGILPWFWMKS----GAVLPRLGLDPENEILHTLSFLAGVMTW 118
QY 132 STLVDLPLSYSHFVLEKFGFNKLTVLQMTDMIKSLTLAYAGGPIYLVFLKIFDKFP 191
Db 119 SQITDLPSLYSTFVIESRHGFNKTQIWMFIRDMIKGTFLSVILGPPVIAAIIIVQKGG 178
QY 192 TDFLWYIMVFLFVVOILAMTIIPVIMPENKFTPLEDGELKKSIESLADRVGFLDKIF 251
Db 179 PYLAIVLWAFMFLISLVNMTIYPVLIAPLNFKNFTPLPDGDLREKIEKLASSLKFLPKLKF 238
QY 252 VIDGSKRSHSNAYFTGLPFTSKRIVLFDTLVNS-NSTDEITAVLAHEIGHQKNHIVNM 310
Db 239 VVDGSTRSSHNAVMYGF-FKNKRIVLYDTLQOCKNEDEIVAVIAHELGHKLNHTTYS 297
QY 311 VIFSQHLTFLIFSFTSIYRNTSFYNTFGFLEKSTGSDVPVITKEPPIIIGFMLENDL 370
Db 298 FIAVQILAFLOFGGYTLVRNSTDLFRSFGFDTQ-----PVLIGLIIFIQHT 342
QY 371 LTPLECAQMFVMSLISRTHEQADAYAKKLGKYNLCRALIDLOIKNLSTMNVDPLYSY 430
Db 343 VIPLQHLVSGNLVSRAFEQADAFVAKLGYAKDLRALVQLQENLSAMNTDPLYSAY 402
QY 431 HYSHTPLAERSTALDYVSEKKK 452
Db 403 HYSHPPLVERLRAID--GEDKK 422

RESULT 6
US-10-210-760A-22
; Sequence 22, Application US/10210760A
; Publication No. US20030204865A1
; GENERAL INFORMATION:
; APPLICANT: Wan, Jiangxin
; APPLICANT: Huang, Yafan
; APPLICANT: Delina Campbell, Mary-Jane
; APPLICANT: Kuzma, Monika Maria
; APPLICANT: Gilley, Angela Patricia
; TITLE OF INVENTION: Caax prenyl protease nucleic acids and polypeptides and
; TITLE OF INVENTION: methods of use thereof
; FILE REFERENCE: 22542-009
; CURRENT APPLICATION NUMBER: US/10/210,760A
; CURRENT FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 22
; LENGTH: 424
; TYPE: PRT

; ORGANISM: Arabidopsis thaliana
US-10-210-760A-22
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Db 3 IPFMTVVGFMIVMYIFETVLDLQRLTALKPLTPKTLVGVISQEKFSRAVSLDKSYF 62
QY 73 SIFGDVYNLAQKLVFIKYDLFPKIMHMAVSLNNAVLV-VRFHMVSTVAQSLCFLGLLSSL 131
Db 63 HFVHEFVTILMDSAILFFGILPWFWMKS-----GAVLPRLGLDPENEILHTLSFLAGVMTW 118
QY 132 STLVDPLPSYSHFVLEEKFGFNKLTQVLWITDMIKSLTLAVAIGGPILYLFKIFDKPP 191
Db 119 SQITDLPFSLYSTFVIESRHGFNKQTIWMFIRDMIKGTLSVLGGPPIVAAIIFIVQKGG 178
QY 192 TDFLWIMVFLPVVOILAMTIIIPVIMPMPNKFPTLEDGELKKSIESLADRVPGLDKIF 251
Db 179 PYLAIVLWAFMPTLSLWMTIIPVLIAPLNFKNFTPLPDGDLREKIEKLASSLKFLPKLUF 238
QY 252 VIDGSRSSHNAFTGLPFTSKRIVLPDTLVNS-NSTDEITAVLAHEIGHQKHNVM 310
Db 239 VVDGSRSSHNAFTGLPFTSKRIVLPDTLVNS-NSTDEITAVLAHEIGHQKHNVM 297
QY 311 VIFSQHLTFLIFSLFTSIYRNTSFYNTFGFLEKSTGTFVDPVITKEPPIIIGFMLFNDL 370
Db 298 FIAVQILAFQGGYTLVRNSTDLFRSGFDTO-----PVLGLIIFQHT 342
QY 371 LTPLECAQFVMSLISRTHEYQADAYAKLGYKONLCRALIDIOIKNLSTMNVDPLYSY 430
Db 343 VIFLQHPVSFGLNLSRAPEFOADAFVAKLGYAKDLRPTLVKLQENLSAMNTDPLYSAY 402
QY 431 HYSHTPLAERSTALDYVSEKK 452
Db 403 HYSHTPLAERSTALDYVSEKK 422

RESULT 7

US-10-229-541A-117
; Sequence 117, Application US/10229541A
; Publication No. US20040010821A1
; GENERAL INFORMATION:
; APPLICANT: McCourt, Peter
; APPLICANT: Ghasseman, Majid
; APPLICANT: Cutler, Sean
; APPLICANT: Bonetta, Dario
; TITLE OF INVENTION: Stress Tolerance and Delayed Senescence in Plants
; FILE REFERENCE: 22542-007C1P2
; CURRENT APPLICATION NUMBER: US/10/229,541A
; CURRENT FILING DATE: 2002-08-27
; PRIOR APPLICATION NUMBER: 10/160,764
; PRIOR FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: 60/294,766
; PRIOR FILING DATE: 2001-05-31
; PRIOR APPLICATION NUMBER: 60/348,909
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: 10/210,760
; PRIOR FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; PRIOR APPLICATION NUMBER: 09/191,687
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 176
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 117
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-10-229-541A-117

Query Match 36.3%; Score 851; DB 4; Length 424;
Best Local Similarity 41.4%; Pred. No. 1.6e-70;
Matches 183; Conservative 72; Mismatches 163; Indels 24; Gaps 6;
QY 13 IPWKLIISGFSIAQFSFESYLTROYQKLSLTKPLVLEDEIDDETHFKSRNYSRAKAKF 72
Db 3 IPFMTVVGFMIVMYIFETVLDLQRLTALKPLTPKTLVGVISQEKFSRAVSLDKSYF 62

QY 73 SIFGDVYNLAQKLVFIKYDLFPKIMHMAVSLNNAVLV-VRFHMVSTVAQSLCFLGLLSSL 131
Db 63 HFVHEFVTILMDSAILFFGILPWFWMKS-----GAVLPRLGLDPENEILHTLSFLAGVMTW 118
QY 132 STLVDPLPSYSHFVLEEKFGFNKLTQVLWITDMIKSLTLAYAIGGPILYLFKIFDKPP 191
Db 119 SQITDLPFSLYSTFVIESRHGFNKQTIWMFIRDMIKGTLSVLGGPPIVAAIIFIVQKGG 178
QY 192 TDFLWIMVFLPVVOILAMTIIIPVIMPMPNKFPTLEDGELKKSIESLADRVPGLDKIF 251
Db 179 PYLAIVLWAFMPTLSLWMTIIPVLIAPLNFKNFTPLPDGDLREKIEKLASSLKFLPKLUF 238
QY 252 VIDGSRSSHNAFTGLPFTSKRIVLPDTLVNS-NSTDEITAVLAHEIGHQKHNVM 310
Db 239 VVDGSRSSHNAFTGLPFTSKRIVLPDTLVNS-NSTDEITAVLAHEIGHQKHNVM 297
QY 311 VIFSQHLTFLIFSLFTSIYRNTSFYNTFGFLEKSTGTFVDPVITKEPPIIIGFMLFNDL 370
Db 298 FIAVQILAFQGGYTLVRNSTDLFRSGFDTO-----PVLGLIIFQHT 342
QY 371 LTPLECAQFVMSLISRTHEYQADAYAKLGYKONLCRALIDIOIKNLSTMNVDPLYSY 430
Db 343 VIFLQHPVSFGLNLSRAPEFOADAFVAKLGYAKDLRPTLVKLQENLSAMNTDPLYSAY 402
QY 431 HYSHTPLAERSTALDYVSEKK 452
Db 403 HYSHTPLAERSTALDYVSEKK 422

RESULT 8

US-10-210-760A-30
; Sequence 30, Application US/10210760A
; Publication No. US20030204865A1
; GENERAL INFORMATION:
; APPLICANT: Wan, Jiangxin
; APPLICANT: Huang, Yafan
; APPLICANT: Delina Campbell, Mary-Jane
; APPLICANT: Kuzma, Monika Maria
; APPLICANT: Gilley, Angela Patricia
; TITLE OF INVENTION: Coax prenyl protease nucleic acids and polypeptides and
; FILE REFERENCE: 22542-009
; CURRENT APPLICATION NUMBER: US/10/210,760A
; CURRENT FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 30
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-10-210-760A-30

Query Match 36.3%; Score 850; DB 4; Length 424;
Best Local Similarity 41.4%; Pred. No. 2e-70;
Matches 183; Conservative 73; Mismatches 162; Indels 24; Gaps 6;

QY 13 IPWKLIISGFSIAQFSFESYLTROYQKLSLTKPLVLEDEIDDETHFKSRNYSRAKAKF 72
Db 3 IPFMTVVGFMIVMYIFETVLDLQRLTALKPLTPKTLVGVISQEKFSRAVSLDKSYF 62
QY 73 SIFGDVYNLAQKLVFIKYDLFPKIMHMAVSLNNAVLV-VRFHMVSTVAQSLCFLGLLSSL 131
Db 63 HFVHEFVTILMDSAILFFGILPWFWMKS-----GAVLPRLGLDPENEILHTLSFLAGVMTW 118
QY 132 STLVDPLPSYSHFVLEEKFGFNKLTQVLWITDMIKSLTLAYAIGGPILYLFKIFDKPP 191
Db 119 SQITDLPFSLYSTFVIESRHGFNKQTIWMFIRDMIKGTLSVLGGPPIVAAIIFIVQKGG 178


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Db 298 FIAVQILAFIQGGYTLRNSTDLFRSFGFDQ-----PVLIGLIIFQHT 342
QY 371 LTPLECAMQFVMSLISRTHEYQADAYAKKGYKQKLCRALIDIQIKNLSTMNVDPLYSSY 430
Db 343 VIPLOHLVSGNLVSRAFEFQADAFVAKLDYAKDLRPALVKLQEBNLSMTNTDPLYSAY 402
QY 431 HYSHPTLAERSTALDYVSEKKK 452
Db 403 HYSHPPLVERLRATD--GEDKK 422

RESULT 11
US-10-229-541A-98
; Sequence 98, Application US/10229541A
; Publication No. US20040010821A1
; GENERAL INFORMATION:
; APPLICANT: McCourt, Peter
; APPLICANT: Ghasseman, Majid
; APPLICANT: Cutler, Sean
; APPLICANT: Bonetta, Dario
; TITLE OF INVENTION: Stress Tolerance and Delayed Senescence in Plants
; FILE REFERENCE: 22542-007C1P2
; CURRENT APPLICATION NUMBER: US/10/229, 541A
; CURRENT FILING DATE: 2002-08-27
; PRIOR APPLICATION NUMBER: 10/160, 764
; PRIOR FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: 60/294, 766
; PRIOR FILING DATE: 2001-05-31
; PRIOR APPLICATION NUMBER: 60/348, 909
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: 10/210, 760
; PRIOR FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309, 396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337, 084
; PRIOR FILING DATE: 2001-12-04
; PRIOR APPLICATION NUMBER: 09/191, 687
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 176
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 98
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-10-229-541A-98

Query Match 36.3%; Score 849; DB 4; Length 424;
Best Local Similarity 41.6%; Pred. No. 2.5e-70;
Matches 184; Conservative 71; Mismatches 163; Indels 24; Gaps 6;

QY 13 IPWKLIISGFSIAQFSPESVLTROYQKLSLTKLPVLEDEIDDETFHKSRYNYSRAKAF 72
Db 3 IPFMETVVGFMVIMYIFETYDLRLQHTALKPLTKPLVGVISQEKFEKSRAYSLSKSYF 62
QY 73 SIFGDVYNLAQKLVFIKYDLFPKIHMAVSLNNAVLP--VRFHMVSTVAQSLCFLGLSSL 131
Db 63 HFVHEFVTILMDSAILFFGILPFWKIS----GAVLPRLGLDPENEILHTLSFLAGVMTW 118
QY 132 STLVDLPLSYSHFVLEBEKFGNKLTVOLWITDMIKSLTLAYAGGPILYFLKIFDKFP 191
QY 119 SQITDLPFSLYSTFVIESRHGFKQTIWMFIRDMIKGILLSVIPAPPIVAAIIVQKGG 178
Db 119 SQITDLPFSLYSTFVIESRHGFKQTIWMFIRDMIKGILLSVIPAPPIVAAIIVQKGG 178
QY 192 TDFLWYIMVFLVVOILAMTIIPVFIIMPENKFTPLEDGELKKSIESLADRVGFPLDKIF 251
Db 179 PYLAIVLWAFMFIILSVMMTIYPVLIAPLNFKNFTPLPDGDLREKIEKLSLKFPLKLF 238
QY 252 VIDGSKSSHSNAYFTGLPFTSKRIVLFDTLVNS--NSTDEITAVLAHEIGHWQKNHIVNM 310
Db 239 VVDGSTRSSHSNAYMGF--FKNKRIVLYDTLIQQCKQNEIEIVAVIAHELGHWKLNHTYS 297
QY 311 VIFSQHTLFIISLFTSIYRNTSFYNTFGFLEKSTGSGFVDPVITKEFPPIIIGMFLFNDL 370
Db 298 FIAVQILAFIQGGYTLRNSTDLFRSFGFDQ-----PVLIGLIIFQHT 342
QY 371 LTPLECAMQFVMSLISRTHEYQADAYAKKGYKQKLCRALIDIQIKNLSTMNVDPLYSSY 430
Db 343 VIPLOHLVSGNLVSRAFEFQADAFVAKLDYAKDLRPALVKLQEBNLSMTNTDPLYSAY 402
QY 431 HYSHPTLAERSTALDYVSEKKK 452
Db 403 HYSHPPLVERLRATD--GEDKK 422
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QY 371 LTPLECAMQFVMSLISRTHEYQADAYAKKGYKQKLCRALIDIQIKNLSTMNVDPLYSSY 430
Db 343 VIPLOHLVSGNLVSRAFEFQADAFVAKLDYAKDLRPALVKLQEBNLSMTNTDPLYSAY 402
QY 431 HYSHPTLAERSTALDYVSEKKK 452
Db 403 HYSHPPLVERLRATD--GEDKK 422

RESULT 12
US-10-210-760A-15
; Sequence 15, Application US/10210760A
; Publication No. US20030204865A1
; GENERAL INFORMATION:
; APPLICANT: Man, Jiangxin
; APPLICANT: Huang, Yafan
; APPLICANT: Delina Campbell, Mary-Jane
; APPLICANT: Kuzma, Monika Maria
; APPLICANT: Gilley, Angela Patricia
; TITLE OF INVENTION: Caax prenyl protease nucleic acids and polypeptides and
; FILE REFERENCE: 22542-009
; CURRENT APPLICATION NUMBER: US/10/210, 760A
; CURRENT FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309, 396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337, 084
; PRIOR FILING DATE: 2001-12-04
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Brassica napus
US-10-210-760A-15

Query Match 35.7%; Score 836; DB 4; Length 424;
Best Local Similarity 40.7%; Pred. No. 4.1e-69;
Matches 180; Conservative 73; Mismatches 165; Indels 24; Gaps 6;

QY 13 IPWKLIISGFSIAQFSPESVLTROYQKLSLTKLPVLEDEIDDETFHKSRYNYSRAKAF 72
Db 3 IPFMETVVGFMVIMYIFETYDLRLQHTALKPLTKPLVGVISQEKFEKSRAYSLSKSHF 62
QY 73 SIFGDVYNLAQKLVFIKYDLFPKIHMAVSLNNAVLP--VRFHMVSTVAQSLCFLGLSSL 131
Db 63 HFVHEFVTILMDSAILFFGILPFWKIS----GGFLPMVGLDPENEILHTLSFLAGMTW 118
QY 132 STLVDLPLSYSHFVLEBEKFGNKLTVOLWITDMIKSLTLAYAGGPILYFLKIFDKFP 191
Db 119 SQITDLPFSLYSTFVIESRHGFKQTIWMFIRDMIKGILLSVIPAPPIVAAIIVQKGG 178
QY 192 TDFLWYIMVFLVVOILAMTIIPVFIIMPENKFTPLEDGELKKSIESLADRVGFPLDKIF 251
Db 179 PYLAIVLWAFMFIILSVMMTIYPVLIAPLNFKNFTPLPDGDLREKIEKLSLKFPLKLF 238
QY 252 VIDGSKSSHSNAYFTGLPFTSKRIVLFDTLVNS--NSTDEITAVLAHEIGHWQKNHIVNM 310
Db 239 VVDGSTRSSHSNAYMGF--FKNKRIVLYDTLIQQCKQNEIEIVAVIAHELGHWKLNHTYS 297
QY 311 VIFSQHTLFIISLFTSIYRNTSFYNTFGFLEKSTGSGFVDPVITKEFPPIIIGMFLFNDL 370
Db 298 FIAVQILAFIQGGYTLRNSTDLFRSFGFDQ-----PVLIGLIIFQHT 342
QY 371 LTPLECAMQFVMSLISRTHEYQADAYAKKGYKQKLCRALIDIQIKNLSTMNVDPLYSSY 430
Db 343 VIPLOHLVSGNLVSRAFEFQADAFVAKLDYAKDLRPALVKLQEBNLSMTNTDPLYSAY 402
QY 431 HYSHPTLAERSTALDYVSEKKK 452
Db 403 HYSHPPLVERLRATD--GEDKK 422
```

RESULT 13

US-10-229-541A-110
; Sequence 110, Application US/10229541A
; Publication No. US20040010821A1
; GENERAL INFORMATION:
; APPLICANT: McCourt, Peter
; APPLICANT: Ghassseman, Majid
; APPLICANT: Cutler, Sean
; APPLICANT: Bonetta, Dario
; TITLE OF INVENTION: Stress Tolerance and Delayed Senescence in Plants
; FILE REFERENCE: 22542-007CIP2
; CURRENT APPLICATION NUMBER: US/10/229,541A
; CURRENT FILING DATE: 2002-08-27
; PRIOR APPLICATION NUMBER: 10/160,764
; PRIOR FILING DATE: 2002-05-31
; PRIOR APPLICATION NUMBER: 60/294,766
; PRIOR FILING DATE: 2001-05-31
; PRIOR APPLICATION NUMBER: 60/348,909
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: 10/210,760
; PRIOR FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; PRIOR APPLICATION NUMBER: 09/191,687
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 176
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 110
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Brassica napus
US-10-229-541A-110

Query Match 35.7%; Score 836; DB 4; Length 424;
Best Local Similarity 40.7%; Pred. No. 4.1e-69;
Matches 180; Conservative 73; Mismatches 165; Indels 24; Gaps 6;
Qy 13 IPWKLIISGFSIAQSPFESYLTYROYKLSKTPVLEDEIDDETFHKSRYNSRAKAF 72
Db 3 IPFMTVGVFMIVMVFETYLDLROHTALKPLTPKTLGVVISQEKFSKRAYSLDKSHF 62
Qy 73 SIFGDVYNLAOKLVFIKVDLPKIHMAVSLNVLVLP-VRFHMVSTVAQSLCFLGLSSL 131
Db 63 HPVHEFVTLMDSAILFFGILPFWFKIS----GGFLPMVGLDPENEILHTLSFLAGMTW 118
Qy 132 STLVDPLSYSHFVLEKFGFNKLTVOILWITDMIKSLTLAYAGGPILYLFKIFDKXP 191
Db 119 SQITDLPFSLYSTFVIESRHGFKNTIWMFIRDMIKGILLSVIPAPPIVAAIIVQKGG 178
Qy 192 TDFLWYIMVFLFVVOILAMTIIPVFMFPMFNKFTPLEDEGELKKSIESLADRVGPPDKIF 251
Db 179 PVLAIYLWAFMILSVMMVTIYVLIAPLNFKNFTPLPDGDLREKIEKCLASSLKFPLKXLF 238
Qy 252 VIDGSKRSHSNAYFTGLPFTSKRIVLFDTLVNS-NSTDTEITAVLAHEIGHWOKHIVNM 310
Db 239 VVDGSTRSHSNAYMYGF-FKNKRIVLYDTLQOQONENIIVAVIAHELGHKLNHTTYS 297
Qy 311 VFSQHTLFLIFSLFTSIYRNTSFYNTGFFLEKSTGSDVPVITKEPPIIGFMLENDL 370
Db 298 FIAVOILAFLOQGGYTLVRNSDLPFRSGFDQ-----PVLIGLIIFQHTV 342
Qy 371 LTPLECAMQFVMSLSIRTHEYQADAYAKGLYKQNLCRALIDLOIKNLSTMNVDPLSSY 430
Db 343 VIPLQHLVSFDNLNVSRAFEQADAFANVLGVAKDLRPALVKLOEENLSAMNTDPLYSAY 402
Qy 431 HVSHTPLAERSTALDYVSEKK 452
Db 403 HYSHPPLVERLAID--GEDKK 422

RESULT 14

US-10-424-599-263806
; Sequence 263806, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 263806
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_80236C.1.pep
US-10-424-599-263806

Query Match 35.7%; Score 836; DB 4; Length 424;
Best Local Similarity 40.3%; Pred. No. 4.1e-69;
Matches 177; Conservative 70; Mismatches 172; Indels 20; Gaps 4;
Qy 14 PWKLIISGFSIAQSPFESYLTYROYKLSKTPVLEDEIDDETFHKSRYNSRAKAFS 73
Db 4 PYMEAVVGVFMILMYIFETYLDVROHRAKLPKTLPLEGVISQEKFSKRAYSLDKSHFH 63
Qy 74 IFGDVYNLAOKLVFIKVDLPKIHMAVSLNVLVLPVRFHMVSTVAQSLCFLGLSSLST 133
Db 64 PVHEFVITVDTILYFGVLPFWFKSGDFMTI---AGFNAENILHTLAFAGLMIWSQ 120
Qy 134 LVDLPLSYSHFVLEKFGFNKLTVOILWITDMIKSLTLAYAGGPILYLFKIFDKPFTD 193
Db 121 ITDLPFSLYSTFVIEARHGFKNTPLFFRDMKLGIFLSVIIGPPIVAAIIVQKGGPY 180
Qy 194 FLWIMVFLFVVOILAMTIIPVFMFPMFNKFTPLEDEGELKKSIESLADRVGPPDKIFVI 253
Db 181 LAIYLWVFTFGLSVMMVTIYVLIAPLNFKNFTPLPDGDLREKIEKCLASSLNPPLKLFV 240
Qy 254 DGSKRSHSNAYFTGLPFTSKRIVLFDTLVNSNTD-EITAVLAHEIGHWOKHIVNMVI 312
Db 241 DGSTRSHSNAYMYGF-FKNKRIVLYDTLQOQKDDSEIIVAVIAHELGHKLNHTVYTFV 299
Qy 313 FSQHTLFLIFSLFTSIYRNTSFYNTGFFLEKSTGSDVPVITKEPPIIGFMLENDLLT 372
Db 300 AMQILTLQFGGYTLVRNSADLYRSFGFDQ-----PVLIGLIIFQHTVI 344
Qy 373 PLECAMQFVMSLSIRTHEYQADAYAKGLYKQNLCRALIDLOIKNLSTMNVDPLSSYHY 432
Db 345 PLOQLVSGFLNLSRSFEQADGFAKGLGYASGLRGGLVGLKLOEENLSAMNTDPLWSAYH 404
Qy 433 SHPTLAERSTALDYVSEKK 451
Db 405 SHPPLEVERLAVLDEPDKE 423

RESULT 15

US-10-210-760A-18
; Sequence 18, Application US/10210760A
; Publication No. US20030204865A1
; GENERAL INFORMATION:
; APPLICANT: Wan, Jiangxin
; APPLICANT: Huang, Yafan
; APPLICANT: Delina Campbell, Mary-Jane
; APPLICANT: Kuzma, Monika Maria
; APPLICANT: Gilley, Angela Patricia
; TITLE OF INVENTION: Caax prenyl protease nucleic acids and polypeptides and
; TITLE OF INVENTION: methods of use thereof
; FILE REFERENCE: 22542-009

Fri Dec 9 07:55:38 2005

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; CURRENT APPLICATION NUMBER: US/10/210,760A
; CURRENT FILING DATE: 2002-08-01
; PRIOR APPLICATION NUMBER: 60/309,396
; PRIOR FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: 60/337,084
; PRIOR FILING DATE: 2001-12-04
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 18
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Glycine max
US-10-210-760A-18

Query Match      35.6%; Score 833; DB 4; Length 424;
Best Local Similarity 40.3%; Pred. No. 7.9e-69;
Matches 177; Conservative 70; Mismatches 172; Indels 20; Gaps 4;

Qy 14 PWKLIISGFSIAQFSRESYLTVROYQKLSLTKLPVLEDEIDDETFHKSRNYSRAKAKES 73
Db 4 PYMEAVVGFMILMYIFETYLDRQHRALKLPTLPKTEGVISOEKFESKRAYSLDKSHFH 63

Qy 74 IFGDVYNLAQKLVFIKYDLFPFKIWHMAVSLNNAVLPRFHMVSTVAQSLCFLGLSSLSST 133
Db 64 FVHEFVTIVTDSITLYFGVLPWFMKXSGDFMTI---AGFNAENEILHTLAFLAGLMIWSQ 120

Qy 134 LVDLPISYSHFVLEKFGFNKLTQVIMTDMIKSLTLAYAGGPILYLFKIFDKFPTD 193
Db 121 ITDLPFSLYSTFVEARHGFGNKQTPWLFRRDMLKGIFLSVIGPPIVAAIIVIVQKGPY 180

Qy 194 FLWYIMVFLFVQIOLAMTIIIPVIMPENKFTPLEDEGLKCKSTESLADRVGRPLDKIFVI 253
Db 181 LAIYLVWFTFGLSIVMMTLYPVLIAPLNFNKTPLPDGQREKIEKCLASSLNYPLKLFVV 240

Qy 254 DGSKRSSHNAFTGLPFTSKRIVLFDTLVNSSTD-EITAVLAHEIGHWQKNHIVNMVI 312
Db 241 DGSTRSSHNAFTWYGF-FKNKRIVPYDTLLIQCKDDEEIVAVIAHELGHKLNHTVYTFV 299

Qy 313 FSQHTFLIPSLFTSIYRNTSFYNTFGFLEKSTGSDVDPVITKEPPIIIGFMLFNDLLT 372
Db 300 AMQILTLLQFGGYTLVRNSADLYRSFGFDQ-----PVLIGLIIFQHTVI 344

Qy 373 PLSCAMQFVMSLISRTHEYQADAVAKKGYKQNLCRALIDLOIKNLSTMNVDPLYSSYHY 432
Db 345 PLQQLVSGNLVRSFEPFQADGFAKKGAGLGGGLVKLQBEENLSAMNTDPWYSAYHY 404

Qy 433 SHPTLAERSTALDYVSEKK 451
Db 405 SHPPLVERLAALDEPDCKE 423
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Search completed: December 9, 2005, 03:13:57
Job time : 78.6797 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 8, 2005, 18:38:35 ; Search time 27.1328 Seconds
(without alignment)
1380.324 Million cell updates/sec

Title: US-09-165-460A-2
Perfect score: 2342
Sequence: 1 MFDLKTILDHPNIPWKLIIS.....HPTLAERSTALDYVEKKKN 453

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5 COMB.pap:*
2: /cgn2_6/ptodata/1/iaa/6 COMB.pap:*
3: /cgn2_6/ptodata/1/iaa/H COMB.pap:*
4: /cgn2_6/ptodata/1/iaa/PCFUS COMB.pap:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2336	99.7	453	2	US-09-538-092-472
2	2336	99.7	472	2	US-09-486-192-3
3	2336	99.7	472	2	US-10-328-459A-3
4	2288.5	97.7	451	2	US-09-184-984-3
5	1239	52.9	490	2	US-09-248-796A-19910
6	903	38.6	474	2	US-09-486-192-4
7	903	38.6	474	2	US-10-328-459A-4
8	653	27.9	474	2	US-09-022-699-2
9	328	14.0	426	2	US-09-486-192-2
10	328	14.0	426	2	US-10-328-459A-2
11	180.5	7.7	397	2	US-09-328-540-13316
12	161.5	6.9	310	2	US-09-328-332-5485
13	158.5	6.8	308	2	US-09-540-236-2093
14	155.5	6.6	321	2	US-09-252-991A-26066
15	147.5	6.3	283	2	US-09-486-192-6
16	147.5	6.3	283	2	US-10-328-459A-6
17	133.5	5.7	298	2	US-09-543-681A-7914
18	125.5	5.4	305	2	US-09-902-540-16700
19	122.5	5.2	299	2	US-09-769-787-106
20	121.5	5.2	302	2	US-09-583-110-4512
21	121.5	5.2	302	2	US-09-107-433-4866
22	119	5.1	299	2	US-09-489-039A-14167
23	111.5	4.8	376	2	US-09-107-532A-6448
24	111.5	4.8	760	2	US-09-833-017B-28
25	110.5	4.7	420	2	US-09-134-001C-3805
26	105	4.5	1427	2	US-09-487-558B-354
27	105	4.5	3200	1	US-08-477-451-8

28	104	4.4	333	2	US-09-393-634-3	Sequence 3, Appli
29	103	4.4	471	2	US-09-830-230A-574	Sequence 574, App
30	103	4.4	490	2	US-09-830-230A-573	Sequence 573, App
31	103	4.4	1101	2	US-09-770-170-8	Sequence 8, Appli
32	101.5	4.3	405	2	US-09-248-796A-17965	Sequence 17965, A
33	101.5	4.3	717	2	US-09-583-110-4629	Sequence 4629, Ap
34	101.5	4.3	721	2	US-09-107-433-2819	Sequence 2819, Ap
35	101	4.3	502	2	US-09-134-000C-6614	Sequence 6614, Ap
36	100.5	4.3	1226	1	US-08-540-804-12	Sequence 12, Appl
37	100.5	4.3	1226	1	US-08-218-265-12	Sequence 12, Appl
38	100.5	4.3	1226	2	US-08-521-872-12	Sequence 12, Appl
39	100.5	4.3	1226	2	US-08-590-399-12	Sequence 12, Appl
40	100	4.3	542	2	US-09-358-383C-5	Sequence 5, Appli
41	100	4.3	1102	2	US-09-358-383C-36	Sequence 36, Appl
42	100	4.3	1107	2	US-09-358-383C-16	Sequence 16, Appl
43	100	4.3	1228	2	US-09-439-313-537	Sequence 537, App
44	100	4.3	1228	2	US-09-636-215-537	Sequence 537, App
45	100	4.3	1228	2	US-09-685-166A-537	Sequence 537, App

ALIGNMENTS

RESULT 1
US-09-538-092-472
; Sequence 472, Application US/09538092
; Patent No. 6753314
; GENERAL INFORMATION:
; APPLICANT: Giot, Loic
; APPLICANT: Mansfield, Traci A.
; TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same
; FILE REFERENCE: 15966-542
; CURRENT APPLICATION NUMBER: US/09/538,092
; CURRENT FILING DATE: 2000-03-29
; PRIOR APPLICATION NUMBER: 60/127,352
; PRIOR FILING DATE: 1999-04-01
; PRIOR APPLICATION NUMBER: 60/178,965
; PRIOR FILING DATE: 2000-02-01
; NUMBER OF SEQ ID NOS: 1387
; SOFTWARE: CurapSeqFormatter Version 0.9
; SEQ ID NO 472
; LENGTH: 453
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Polypeptide Accession Number YJR117M
US-09-538-092-472

Query Match	99.7%	Score	2336	DB 2:	Length	453
Best Local Similarity	99.8%	Pred. No.	8.5e-235	Mismatches	1	Indels
Matches	452	Conservative	0			Gaps
						0
Qy	1	MFDLKTILDHPNIPWKLIISGFSIAQSFESYLYTYQYQKLSKLPVLEDEIDDETFH	60			
Db	1	MFDLKTILDHPNIPWKLIISGFSIAQSFESYLYTYQYQKLSKLPVLEDEIDDETFH	60			
Qy	61	KSRNYSRAKAFSIFGVDVYNLAQKLVPIKYDLFPKIHMAVSLNVLVRFHVMVSTVAQ	120			
Db	61	KSRNYSRAKAFSIFGVDVYNLAQKLVPIKYDLFPKIHMAVSLNVLVRFHVMVSTVAQ	120			
Qy	121	SLCFLGLLSLSTLVDLPVLSYSHFVLEKFGFNKLTQVLMITDMIKSLTLAYVIGGPIL	180			
Db	121	SLCFLGLLSLSTLVDLPVLSYSHFVLEKFGFNKLTQVLMITDMIKSLTLAYVIGGPIL	180			
Qy	181	YLFLEKIDFKPTDFLWYIMVFLFVQVQLAMTIIIPVFMFPMFNKFTPLDGLGKKSIESLA	240			
Db	181	YLFLEKIDFKPTDFLWYIMVFLFVQVQLAMTIIIPVFMFPMFNKFTPLDGLGKKSIESLA	240			
Qy	241	DRVGFPLDKIFVIDGSKRSRSHSNAYFTGLPFTSKRIIVLFDTLVNSNSTDEITAVLAHEIG	300			
Db	241	DRVGFPLDKIFVIDGSKRSRSHSNAYFTGLPFTSKRIIVLFDTLVNSNSTDEITAVLAHEIG	300			

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QY 301 HWQKXHI VNMVIFSQLHTFLIFSLFTSIYRNTSFYNTFGFFLEKSTGTSFVDPVITKEPPI 360
DB 301 HWQKXHI VNMVIFSQLHTFLIFSLFTSIYRNTSFYNTFGFFLEKSTGTSFVDPVITKEPPI 360
QY 361 IIGFMLFNDLLTPLECAMQFVMSLISRTHEYQADAYAKKLGKYGKQNLCRALIDLQIKNLST 420
DB 361 IIGFMLFNDLLTPLECAMQFVMSLISRTHEYQADAYAKKLGKYGKQNLCRALIDLQIKNLST 420
QY 421 MNVDPLYSSYHYSHPTLAERSTALDYVSEKKK 453
DB 421 MNVDPLYSSYHYSHPTLAERSTALDYVSEKKK 453

RESULT 2
US-09-486-192-3
; Sequence 3, Application US/09486192
; Patent No. 6521440
; GENERAL INFORMATION:
; APPLICANT: Estell, David A.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: GC386-US
; CURRENT APPLICATION NUMBER: US/09/486,192
; CURRENT FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: PCT/US98/18677
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 472
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-09-486-192-3

Query Match 99.7%; Score 2336; DB 2; Length 472;
Best Local Similarity 99.8%; Pred. No. 9.1e-235;
Matches 452; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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DB 61 KSRNYSRAKAKFSIFGDVYNLAQKLVFIKYDLFPKIHMAVSLNNAVLVPRFHMVSTVAQ 120
QY 121 SLCFLGLSSLTLDVLPYSYSHFVLEKFGFNKLTVOLWITDMIKSLTLAYAIKGPIL 180
DB 121 SLCFLGLSSLTLDVLPYSYSHFVLEKFGFNKLTVOLWITDMIKSLTLAYAIKGPIL 180
QY 181 YLFKIFDKFPTDFLWIMVFLVQILAMTIIPVIMPMFNKFTPLEDGELKKSIESLA 240
DB 181 YLFKIFDKFPTDFLWIMVFLVQILAMTIIPVIMPMFNKFTPLEDGELKKSIESLA 240
QY 241 DRVGFPDLKIFVIDGSKSSHSNAYFTGLPFTSKRIVLFDTLVNSNSTDEITAVLAHEIG 300
DB 241 DRVGFPDLKIFVIDGSKSSHSNAYFTGLPFTSKRIVLFDTLVNSNSTDEITAVLAHEIG 300
QY 301 HWQKXHI VNMVIFSQLHTFLIFSLFTSIYRNTSFYNTFGFFLEKSTGTSFVDPVITKEPPI 360
DB 301 HWQKXHI VNMVIFSQLHTFLIFSLFTSIYRNTSFYNTFGFFLEKSTGTSFVDPVITKEPPI 360
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QY 421 MNVDPLYSSYHYSHPTLAERSTALDYVSEKKK 453
DB 421 MNVDPLYSSYHYSHPTLAERSTALDYVSEKKK 453
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RESULT 3
US-10-328-459A-3
; Sequence 3, Application US/10328459A
; Patent No. 6905868
; GENERAL INFORMATION:
; APPLICANT: Genencor International, Inc.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: GC386-PCT
; CURRENT APPLICATION NUMBER: US/10/328,459A
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: PCT/US98/
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 472
; TYPE: PRT
; ORGANISM: S. cerevisiae
US-10-328-459A-3

Query Match 99.7%; Score 2336; DB 2; Length 472;
Best Local Similarity 99.8%; Pred. No. 9.1e-235;
Matches 452; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MFDLKTILDHPNIPWKLIISGFSIAQSFESYLTIRYQKLSLTKLPVLEDEIDDETFH 60
DB 1 MFDLKTILDHPNIPWKLIISGFSIAQSFESYLTIRYQKLSLTKLPVLEDEIDDETFH 60
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DB 61 KSRNYSRAKAKFSIFGDVYNLAQKLVFIKYDLFPKIHMAVSLNNAVLVPRFHMVSTVAQ 120
QY 121 SLCFLGLSSLTLDVLPYSYSHFVLEKFGFNKLTVOLWITDMIKSLTLAYAIKGPIL 180
DB 121 SLCFLGLSSLTLDVLPYSYSHFVLEKFGFNKLTVOLWITDMIKSLTLAYAIKGPIL 180
QY 181 YLFKIFDKFPTDFLWIMVFLVQILAMTIIPVIMPMFNKFTPLEDGELKKSIESLA 240
DB 181 YLFKIFDKFPTDFLWIMVFLVQILAMTIIPVIMPMFNKFTPLEDGELKKSIESLA 240
QY 241 DRVGFPDLKIFVIDGSKSSHSNAYFTGLPFTSKRIVLFDTLVNSNSTDEITAVLAHEIG 300
DB 241 DRVGFPDLKIFVIDGSKSSHSNAYFTGLPFTSKRIVLFDTLVNSNSTDEITAVLAHEIG 300
QY 301 HWQKXHI VNMVIFSQLHTFLIFSLFTSIYRNTSFYNTFGFFLEKSTGTSFVDPVITKEPPI 360
DB 301 HWQKXHI VNMVIFSQLHTFLIFSLFTSIYRNTSFYNTFGFFLEKSTGTSFVDPVITKEPPI 360
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DB 361 IIGFMLFNDLLTPLECAMQFVMSLISRTHEYQADAYAKKLGKYGKQNLCRALIDLQIKNLST 420
QY 421 MNVDPLYSSYHYSHPTLAERSTALDYVSEKKK 453
DB 421 MNVDPLYSSYHYSHPTLAERSTALDYVSEKKK 453

RESULT 4
US-09-184-964-3
; Sequence 3, Application US/09184964
; Patent No. 6391574
; GENERAL INFORMATION:
; APPLICANT: Rine, Jasper D.
; APPLICANT: Boyartchuk, Victor L.
; APPLICANT: Ashby, Matthew N.
; TITLE OF INVENTION: AFCl AND RCEl; ISOPRENYLATED CAAX
; TITLE OF INVENTION: PROCESSING ENZYMES
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill road, suite 100
```

CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/184.964
FILING DATE: 03-NOV-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/902,774
FILING DATE: 30-JUL-1997
APPLICATION NUMBER: 60/023,491
FILING DATE: 07-AUG-1996
ATTORNEY/AGENT INFORMATION:
NAME: Suvat, Reginald J.
REGISTRATION NUMBER: 28,172
REFERENCE/DOCKET NUMBER: 09272-006004
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/322-5070
TELEFAX: 650/854-0875
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 451 amino acids
TYPE: amino acid
TOPOLOGY: unknown
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: peptide
LOCATION: 1...451
OTHER INFORMATION: /note = "The sequence of the Afclp protein from yeast presented as a polypeptide sequence"

US-09-184-964-3

Query Match 97.7%; Score 2288.5; DB 2; Length 451;
Best Local Similarity 98.9%; Pred. No. 7.6e-230;
Matches 446; Conservative 0; Mismatches 4; Indels 1; Gaps 1;
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Db 1 MFDLKTLDHNPWKLIISGFSIAQSFESVLYRQYQKLSLTPVLEDEIDDETFH 60
Qy 61 KSRNYSRAKAFSIFGDVYVNLAKLVFIKYDLFPKIMHMAVSLNNAVLPRFHMVSTVAQ 120
Db 61 KSRNYSRAKAFSIFGDVYVNLAKLVFIKYDLFPKIMHMAVSLNNAVLPRFHMVSTVAQ 120
Qy 121 SLCLGLLSLSTLDVPLSYSHFVLEKEFGFNKLTVMQITDMIKSLTLAYAGGPIL 180
Db 121 SLCLGLLSLSTLDVPLSYSHFVLEKEFGFNKLTVMQITDMIKSLTLAYAGGPIL 180
Qy 181 YLFKIFDKPPTDLWYIMVFLFVQILAMTIIPVIMPENKFTPLDGLKKSIESLA 240
Db 181 YLFKIFDKPPTDLWYIMVFLFVQILAMTIIPVIMPENKFTPLDGLKKSIESLA 240
Qy 241 DRVGFPLDKIFVIGDSKSSHSNAYFTGLPFTSKRIVLFDLVNSNSTDEITAVLAHEIG 300
Db 241 DRVGFPLDKIFVIGDSKSSHSNAYFTGLPFTSKRIVLFDLVNSNSTDEITAVLAHEIG 300
Qy 301 HQKQNHVNMVIFSQLHTFLIFSLTSIYRNTSFYNTGFFLEKSTG-SFVDPVITKEFP 359
Db 301 HQKQNHVNMVIFSQLHTFLIFSLTSIYRNTSFYNTGFFLEKSTG-SFVDPVITKEFP 360
Qy 360 IIGFMFLNDLLTPLECAQFVMSLISRTHEYQADAYAKKGYKQNLCLALIDLIQKLS 419
Db 361 IIGFMFLNDLLTPLECAQFVMSLISRTHEYQADAYAKKGYKQNLCLALIDLIQKLS 420
Qy 420 TMNVDPVLSYSHYSHPTLAERSTALDYVSEK 450
Db 421 TMNVDPVLSYSHYSHPTLAERSTALDYVSEK 451

RESULT 5
US-09-248-796A-19910
; Sequence 19910, Application US/09248796A
; Patent No. 6747137
; GENERAL INFORMATION:
; APPLICANT: Keith Weinstein et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
; TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.132
; CURRENT APPLICATION NUMBER: US/09/248,796A
; PRIOR FILING DATE: 1999-02-12
; PRIOR APPLICATION NUMBER: US 60/074,725
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: US 60/096,409
; PRIOR FILING DATE: 1998-08-13
; NUMBER OF SEQ ID NOS: 28208
; SEQ ID NO 19910
; LENGTH: 490
; TYPE: PRT
; ORGANISM: Candida albicans
US-09-248-796A-19910

Query Match 52.9%; Score 1239; DB 2; Length 490;
Best Local Similarity 54.1%; Pred. No. 2.4e-120;
Matches 242; Conservative 68; Mismatches 117; Indels 20; Gaps 4;

Qy 8 LDHPNIPWKLIISGFSIAQSFESVLYRQYQKLSLTPVLEDEIDDETFHKSRYSR 67
Db 56 LDSPSNWKTIIVGTIGQYVFETYLDRQYRVLQKTAPKSEKVSQETFDKSEQYSR 115
Qy 68 AKAKFSIFGDVYVNLAKLVFIKYDLFPKIMHMAVSLNNAVLPRFHMVSTVAQSLCF 124
Db 116 AKQAFSIFSTSTFSLQNLAKLVFIKYDLFPKIMHMAVSLNNAVLPRFHMVSTVAQSLCF 173
Qy 125 LGLLSLSTLDVPLSYSHFVLEKEFGFNKLTVMQITDMIKSLTLAYAGGPILYFL 184
Db 174 VFTQILTLGLPLSYSHFVLEKEFGFNKLTVMQITDMIKSLTLAYAGGPILYFL 233
Qy 185 KIFPKFTDLWYIMVFLFVQILAMTIIPVIMPENKFTPLDGLKKSIESLAURVG 244
Db 234 KIIDYFDKFIYLMGFIYVNLAMTIIPVIMPENKFTPLDGLKKSIESLAURVG 293
Qy 245 PFLDKIFVIGDSKSSHSNAYFTGLPFTSKRIVLFDLVNSNSTDEITAVLAHEIGHWQK 304
Db 294 PFLDKIFVIGDSKSSHSNAYFTGLPFTSKRIVLFDLVNSNSTDEITAVLAHEIGHWQK 352
Qy 305 NHIYVNVIFSQLHTFLIFSLTSIYRNTSFYNTGFFLEKSTG-SFVDPVITKEFPILIGF 364
Db 353 NHIYVNVIFSQLHTFLIFSLTSIYRNTSFYNTGFFLEKSTG-SFVDPVITKEFPILIGF 398
Qy 365 MLFNDLLTPLECAQFVMSLISRTHEYQADAYAKKGYKQNLCLALIDLIQKLSNMVND 424
Db 399 MLFNDIIFQVCECLTFVNLISRKHEYADKYASDCGYSELSRSLIKLSNENLSSMNAD 458
Qy 425 PLYSSHYSHPTLAERSTALDYVSEK 451
Db 459 WLFSSHYSHPTLAERSTALDYVSEK 485

RESULT 6
US-09-486-192-4
; Sequence 4, Application US/09486192
; Patent No. 6521440
; GENERAL INFORMATION:
; APPLICANT: Estell, David A.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: GC386-US
; CURRENT APPLICATION NUMBER: US/09/486,192
; CURRENT FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: PCT/US98/18677
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: EP9719637.2

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; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 474
; TYPE: PRT
; ORGANISM: Schizocaccharomyces pombe
US-09-486-192-4

Query Match
Best Local Similarity 40.4%; Score 903; DB 2; Length 474;
Matches 184; Conservative 96; Mismatches 153; Indels 22; Gaps 6;

QY 4 LKTIIDHPNIPWKLIISGFSIAQSPFESYLTIRYQKLSLTKPPVLEDEIDDETHKSR 63
DB 37 LMHILDPGFPWKIVIAGFSIGKYAWDLVLRROVPYLLREKPPALAEHVDEKKYQKAL 96
QY 64 NYSRKAKSFIFGDVYNLAQKLVFIKYDLFPKIWHMA----VSLNNAVLPVRFHVMSTVA 119
DB 97 SYARDKSWFSTIVSTFTTFLAVDLLIIKYDGLSYLWNITKPPWMDKL-AAASSRFSLSIT 155
QY 120 QSLCFGLGLSSLSLTAVDPLSYSHFVLEEKFGFNKLTVOLWITDMIKSLTLAYAGGPI 179
DB 156 HSCVFMFGLTLFSLRIQIPNLYSTFVIEEKYGFNKSITKIFVIDLLKELSLGGLMSV 215
QY 180 LYLFLKIFDKFPTDFLWIMVFLVVOILAMTIIIPVIMPENKFTPLEDGELKKSIESL 239
DB 216 VGVFVKILTGFCDNFIMYAWGAYIVFGLIQTIAPSLIMPLFYKFTPLENGSLRTOIEEL 275
QY 240 ADRVGPDLKIFVIDGSKRSHSNAYFTGLPFTSKRIVLFDTLVNSNSTDEITAVLAHEI 299
DB 276 AASINFLPKLVYIDASRRSTHNSAFYGLPW-NKGIVLFDTLVKNHTEPELIAIGHL 334
QY 300 GHQKQNH-IVNMVIFSQLHTFLIPSFTSYRNTSFYNTFGFPLEKSTGSDVDPVITKEF 358
DB 335 GHWYSHNLINTIIDYGMSLFHLF-LFAAFIRNNSLYTSFNFITEK----- 379
QY 359 PIIGFMLFNDLLTPLECAMQFVMSLSIRTHEYQADAYAKKLYKQNLCLRALIDLOIKNL 418
DB 380 PVIUGLLFSDALGPLSSILTFASNKVSRLCEYQADAFKQYAKDLGDLGRLIRHDDNL 439
QY 419 STMNVDPVLSYSHYSHPTLAERSTALDYVSEKKN 453
DB 440 SPLEFDSLYTSYHSHPIVLDRLNAIDYTLTKNN 474

RESULT 8
US-09-022-699-2
; Sequence 2, Application US/09022699
; Patent No. 6060277
; GENERAL INFORMATION:
; APPLICANT: KIKLY, KRISTINE
; APPLICANT: SOUTHAN, CHRISTOPHER
; APPLICANT: KNAB, ANNE
; TITLE OF INVENTION: Human AFC1
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: RATNER & PRESTIA
; STREET: P.O. BOX 980
; CITY: VALLEY FORGE
; STATE: PA
; COUNTRY: USA
; ZIP: 19482
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/022,699
; FILING DATE: 12-FEB-1998
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 97304440.7
; FILING DATE: 12-JUN-97
; ATTORNEY/AGENT INFORMATION:
; NAME: PRESTIA, PAUL F
; REGISTRATION NUMBER: 23,031
; REFERENCE/DOCKET NUMBER: GH-70380
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610-407-0700
; TELEFAX: 610-407-0701
; TELEX: 846169
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 474 amino acids
; TYPE: amino acid
;

```



```
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; us-09-022-699-2

Query Match      27.9%; Score 653; DB 2; Length 474;
Best Local Similarity 34.7%; Pred. No. 3e-59;
Matches 161; Conservative 73; Mismatches 168; Indels 62; Gaps 8;

Qy 22 PSIAQFSESYLTRQ---YQKLSETKLPVLEIDDEIDETHKGRNYSRAKAKSIFGDV 78
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 26 PSWTYVWETELAQRORRYK--TTTHVPPELGQIMDSSETEKSRLYQLDKSTFSMGL 83
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 79 YNLAQKLVFIKYDLFPKTHWNAVSLNNAVLPRHWNSTVAQSLCFGLLSLTLVDLP 138
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 84 YSETEGTLILFGGIPYLWRLSGRCGY---AGFGPEYEITQSLVFLLLATLFSALTGLP 140
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 139 LSYSHFVLEBEKFGFNKLTVOLWITDMIKSLTLAYAGGPILYLFKIFDKFPPTDFLWYI 198
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 141 WSLYNTFVIEBKGNQOTLGFPMRDAIKKFVVTQCILLPVSSLLLYIKIGDYFFIYA 200
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 199 MVFLFVVOILAMTIIIPVIMPENKFTPLEDGEKKSIESLADRVPGLDKIFVIDGSKR 258
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 201 WLFTLWLSLVLTIVADYIAPLDFKFTPLPEGLKEEIEVMAKSIDPPLTKVYVVEGSKR 260
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 259 SSHSNAYFTGLPFTSKRVLFDTLVNSNS----- 287
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 261 SSHSNAYFYGF-FKNKRIVLFDTLLEYSVLNKDIOEDSGMEPRNEEGNSEETKAKVKN 319
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 288 -----TDEITAVLAHEIGHQKQKHI VNMVIFSQLHTFLFSLFTSIYRNTSFYNTFGFF 341
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 320 KQQCKNEEVLAVLGHGHW-KWDIQSKISLAREFPVFPFLFAVLGRKELFAAFGY 378
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 342 LEKSTGSEVDPVITKEFPIIIGFM-LFNDLLTPLECAMQFVMSLSIRTHEYQADAYAKL 400
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 379 DSQ-----FTLIGLLIIFQIFSPYNEVLSFCLTVLSRRFRFQADAFAKL 424
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 401 GYKQNLCRALIDLQIKNLSTNMVDPLYSSHYSHPTLAERSTAL 444
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 425 GKAKDLYGALIKLNKNDLFGPVSDWLFMSMWHYSHPTLERLQAL 468
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :

RESULT 9
; Sequence 2, Application US/09486192
; Patent No. 6521440
; GENERAL INFORMATION:
; APPLICANT: Estell, David A.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: GC386-US
; CURRENT APPLICATION NUMBER: US/09/486,192
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: PCT/US98/18677
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 426
; TYPE: PRT
; ORGANISM: Bacillus subtilis
; us-09-486-192-2

Query Match      14.0%; Score 328; DB 2; Length 426;
Best Local Similarity 26.9%; Pred. No. 2e-25;
Matches 108; Conservative 76; Mismatches 152; Indels 66; Gaps 14;

Qy 81 LAQKLVFIKYDLF----PKIWHMAVSL-----NAVLPVRPHMVSTVAQSLCF 124
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 53 VAEQYSNVKNFLFFIGVPLDWFLLVSVGSKKKIWKIEAAVPRF-----LQTVGF 106
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 125 LGLLSLSTLVDLPLSYSHFVLEBEKFGFNKLTVOLWITDMIKSLTLAYAGG---PILY 181
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 107 VFVLSLITLVLPLDWIGYQVSLD-YNISQTQTASMAKQDVISFWISFIFTLCVLVY 165
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 182 LFLKIFDKFPDPLWYIMV-----FLVVQILAMTIIIPVIMPENKFTPLEDGEKKSIE 237
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 166 WLIKREKKWMLYAWLLTVPFSLFFFIQ-----PVIIDPLXNDYFPLKXKELESKIL 218
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 238 SLADRVGFPDLKIFVIDGSKSSHNSNAYFTGLPFTSKRVLFDTLVNSNSDEITAVLAH 297
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 219 ELADEANIPADHVEVNMSEKTNALNAYVTGIG-ANKRIVLWDTTLNKDDSEILFIMGH 277
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 298 EIGHQKQKHI VNMVIFSQLHTFLFSL-----FTSIYRNTSFYNTFGFLEKSTGSPVDP 352
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 278 EMGHYVMKH-----VYIGLAGYLLVSLAGFVVIDKLYKRTVRLTRSMFHLSEGRHDLAALP 332
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 353 VITKEFPIIIGFMFLNDLLTPLECAMQFVMSLSIRTHEYQADAYAKL-GYKQNLCRALI 411
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 333 L-----LALLFSLSPAVTTPFSNA-----VSRYQENKADQYGIELTENREAAVKTQ 379
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :

; Sequence 2, Application US/10328459A
; Patent No. 6905868
; GENERAL INFORMATION:
; APPLICANT: Genencor International, Inc.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: GC386-PCT
; CURRENT APPLICATION NUMBER: US/10/328,459A
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: PCT/US98/
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: EP9719637.2
; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 426
; TYPE: PRT
; ORGANISM: Bacillus subtilis
; us-10-328-459A-2

Query Match      14.0%; Score 328; DB 2; Length 426;
Best Local Similarity 26.9%; Pred. No. 2e-25;
Matches 108; Conservative 76; Mismatches 152; Indels 66; Gaps 14;

Qy 81 LAQKLVFIKYDLF----PKIWHMAVSL-----NAVLPVRPHMVSTVAQSLCF 124
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 53 VAEQYSNVKNFLFFIGVPLDWFLLVSVGSKKKIWKIEAAVPRF-----LQTVGF 106
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 125 LGLLSLSTLVDLPLSYSHFVLEBEKFGFNKLTVOLWITDMIKSLTLAYAGG---PILY 181
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 107 VFVLSLITLVLPLDWIGYQVSLD-YNISQTQTASMAKQDVISFWISFIFTLCVLVY 165
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 182 LFLKIFDKFPDPLWYIMV-----FLVVQILAMTIIIPVIMPENKFTPLEDGEKKSIE 237
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 166 WLIKREKKWMLYAWLLTVPFSLFFFIQ-----PVIIDPLXNDYFPLKXKELESKIL 218
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 238 SLADRVGFPDLKIFVIDGSKSSHNSNAYFTGLPFTSKRVLFDTLVNSNSDEITAVLAH 297
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 219 ELADEANIPADHVEVNMSEKTNALNAYVTGIG-ANKRIVLWDTTLNKDDSEILFIMGH 277
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 298 EIGHQKQKHI VNMVIFSQLHTFLFSL-----FTSIYRNTSFYNTFGFLEKSTGSPVDP 352
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 278 EMGHYVMKH-----VYIGLAGYLLVSLAGFVVIDKLYKRTVRLTRSMFHLSEGRHDLAALP 332
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Qy 353 VITKEFPIIIGFMFLNDLLTPLECAMQFVMSLSIRTHEYQADAYAKL-GYKQNLCRALI 411
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
Db 333 L-----LALLFSLSPAVTTPFSNA-----VSRYQENKADQYGIELTENREAAVKTQ 379
   ||| : : : : : ||| : : : : : ||| : : : : : ||| : : : : : ||| :
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Qy 358 --FPILIGFMLFNDLLTLECAMQFVMSLSRTHYQADAYAKKLYKQNLCLRALIDL-- 413
Db 203 PGIAFYVTSVMVDLILGLILASA--IVWFRSLREYRDEMGARLAGRDKMISALNALRP 259
Qy 414 -----QIKNLSTMNVDPLYSYHYSHPTLAERSTAL 444
Db 260 AEARPDQPEAMKAPAIASGSGS-----IASLFRSHPTLDDRIASL 303

RESULT 14

US-09-252-991A-26066
; Sequence 26066, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 26066
; LENGTH: 321
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-26066

Query Match 6.6%; Score 155.5; DB 2; Length 321;
Best Local Similarity 23.2%; Pred. No. 1.3e-07;
Matches 77; Conservative 53; Mismatches 133; Indels 69; Gaps 13;
Qy 145 FVLEKFGFKLTVOLWITDMIKSLTAYAGPILYFLKIF--DKFPTDFLWYIMVFL 202
Db 22 PSREKL-YTMRILLPLATNLAVLIA-----SITLKLGVDRGTQNGYGLLVFC 72
Qy 203 FVVOILAMTIIPVIMPMPNFKFTPLEDGE-----LKKIESLADRVGFPLDK 249
Db 73 AVFG-FAGSLVSLFISKWAK--MSTGTEVISQPRTRHKQWLLQTVEELSREAGIKMPE 128
Qy 250 IFVIGSKRSSHSNAYFTGLPFTSKRIVLFDTLVNSNSTDEITAVLAHEIGHQKHLVN 309
Db 129 V----GIFPAYEANAFATGWNKNALVAVSQGLERFSPDEKAVLAHEIGHVANGDMVT 184
Qy 310 WIFSQLHTFLIFSLFTSIYRNTSFYNTGFFLEKSTGTSFVDPVITK--EPPIIIGFM-- 365
Db 185 LALIQ-----GVNTFVMEFAIFGNFVDKALKNEDGPGIGYFVAT 226
Qy 366 LFNDLLTLECAMQFVMSLSRTHYQADAYAKKLYKQNLCLRALIDLQ-----IKNLS 419
Db 227 IFAEUV--LGILASIIVMWFSRRFRADAGAHLAGTGAMIAAQLRSEQGVVPQMPD 284
Qy 420 TNVDPLYSYHY-----SPTLAERSTAL 444
Db 285 TLNFAFGINGGLKHLGLAGLMLSHPPLEDRIEAL 316

RESULT 15

US-09-486-192-6
; Sequence 6, Application US/09486192
; Patent No. 6521440
; GENERAL INFORMATION:
; APPLICANT: Estell, David A.
; TITLE OF INVENTION: Proteases From Gram-Positive Organisms
; FILE REFERENCE: GC386-US
; CURRENT APPLICATION NUMBER: US/09/486,192
; CURRENT FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: PCT/US98/18677
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: EP9719637.2

; PRIOR FILING DATE: 1997-09-15
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 283
; TYPE: PRT
; ORGANISM: Haemophilis influenza
US-09-486-192-6

Query Match 6.3%; Score 147.5; DB 2; Length 283;
Best Local Similarity 26.5%; Pred. No. 7.3e-07;
Matches 73; Conservative 42; Mismatches 101; Indels 59; Gaps 12;
Qy 198 IMVFLFVVQILAMTIIPVIMPMPNFKFTPLE--DGE-----LKKIESLADRV 243
Db 37 IMALLFG---FAGSLILSLF-----SKTMALRSVDGEVITQPRNQTWRWLDITVSRQAQA 89
Qy 244 GFPLDKIFVIDGSKRSSHSNAYFTGLPFTSKRIVLFDTLVNSNSTDEITAVLAHEIGHWQ 303
Db 90 GIPMPDVAIY---HSPDVNAFATGATKSNLSLAVSTGLLNMNMTAEAAEAVLAHEISHIS 145
Qy 304 KKHIVNVVIP-SQLHTLIF-----SLFTSIYRNTSFYNTGFFLEKSTGTSFVDPVITKE 357
Db 146 NGDMVTMALQGVLTTFVILSRVIATAVASSRNNNGEET-----RSSGIYFLVSMVLE 199
Qy 358 FPIIIGFMLENDLLTLECAMQFVMSLSRTHYQADAYAKKLYKQNLCLRALIDLQ--- 414
Db 200 -----MLFGVLASII--AMWF-----SKYREFRADAGSASLYGCKMKMIALQRLQOLH 245
Qy 415 -----IKNLSTMNVDPLYSYHYSHPTLAERSTAL 444
Db 246 EPQNLEGSINAFMINKRSKSELFSMHPPLEKRIEAL 280

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